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STATUS OF DOD ROBOTIC PROGRAMS

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FINAL REPORT
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INTRODUCTION

→ The US Army Human Engineering Laboratory (USAHEL) has been designated as the US Army Materiel Command (AMC) lead Laboratory for robotics. One of the functions of this assignment is to monitor all of the robotic activities within AMC and to identify areas of overlap and voids in the robotics research and development program. The Director of USAHEL also serves as the Chairman of the Army, Navy, and Air Force Laboratory Directors' Joint Technology Panel on Robotics (JTPR). There is a requirement for the chairman to report periodically on the status of all robotic studies and projects throughout the three Services, exclusive of the Artificial Intelligence (AI) aspects which are being handled as a separate effort.

BACKGROUND

→ The US Navy has been assigned responsibility for the design and maintenance of a Tri-Service robotics data base. This data base is known as the Robotics/Artificial Intelligence Data Base (RAID). The primary source of input to RAID is the DoD Form 1498, "Research and Technology Work Unit Summary". A spot check revealed that many of the current and programmed robotic projects had not been reported on the DoD Form 1498. It was, therefore, determined that a one-time robotic survey of all DoD agencies and activities should be performed. The results of this survey would serve as the primary input for the Director, USAHEL's presentation to the JTPR and would also be used to update the RAID. Since the in-house USAHEL resources were fully committed on other priority tasks that could not be deferred, Armament Systems, Inc. (ASI) was tasked to conduct the survey and to develop a number of statistical summaries that would provide an overview of the entire DoD robotics effort to the JTPR.

OBJECTIVE

The objective of the task was to gather information on all of the research and development projects for the Army, Navy and Air Force, as related to robotics, and to develop an overview of the entire DoD robotics program, as well as some insights into any voids or duplications of effort. (KR) ←

DEFINITIONS/EXPLANATIONS

Because of the rapidity with which the robotic technology is expanding, new terms and applications are appearing in the literature almost on a daily basis. One can find any number of different versions of the basic definition of robotics, depending on whether it is being defined in terms of a manufacturing process, a general functional application or a military systems

application. Therefore, for a better understanding of the information contained in this report, the following definitions and program explanations are provided.

Robot. A system incorporating a computer controller to provide autonomy and reprogrammability which incorporates an end effector of some type (manipulator arm or mobile platform) which exhibits flexibility in the roles which it can perform or the equipment with which it interfaces, and which performs tasks of a complexity level which previously required human control.

Artificial Intelligence. The part of computer science that is concerned with symbol manipulation processes that produce intelligent action. By "intelligent action" is meant an act or decision that is goal oriented, arrived at by an understandable chain or symbolic analysis and reasoning steps and is one in which knowledge of the world informs and guides the reasoning.

Robotic Component Technologies. The application of scientific study and experimentation to specific parts, assemblages and interfaces of a robotic system which performs the basic robotic functions of intelligence, movement and control. Component technology areas can be subdivided into the following categories:

- **Manipulators.** Multi-degree of freedom structures designed to move materials, tools, or sensors through space and includes kinematic optimization techniques, selection of optimum materials and efficient actuators.

- **End Effectors.** Provide the means of interacting with work pieces--flexible, multifunctional. "SMART", i.e., sensor equipped grippers will provide most utility. The end effector is that end of arm tooling that the robot manipulates.

- **Sensors.** The devices such as photoelectric cells that receive and respond to the voice, touch or vision stimuli of a robotic system. Emphasis on means of reducing dependence on a structured working environment (includes acoustic ranging, touch, and force-torque).

- **Mobility/Navigation.** Concerned with the means of locomotion such as wheels, tracks, legs, which can include navigation systems, which incorporate sensor-based information to enable route planning or adhere to previously planned routes.

- **Control.** Controls are micro electronics based which provide means of autonomous action directly interfaced with actuators, servos, i.e., capacity for pre-programming provides means of interface with operator or higher echelons of control. They incorporate the capacity to accommodate to environmental change through processing of sensor-based information. The key

feature is the control of manipulator structural dynamics.

- Soldier/Machine Interface. Optimization of operator interface includes task allocation between operator and robot. It includes implementation of teleoperation, supervisory control (remote management) or fully autonomous, strategies information display. Maintainability and self diagnostics are critical features.

- Power Sources. Concerned with efficient sources of electrical or hydraulic power for extended duty cycles. Optimum interface with existing battlefield power sources and impact on logistics system are important considerations.

- Survivability. Survivability considerations include a wide range of ECM-ECCM-EMP resistant techniques and operational considerations. Robotic systems will require new survivability initiatives to maximize potential combat effectiveness gains from systems with very significant on-board computational capability and (with AI) decision making. Materials handling systems entail initiatives on hydraulics and servo control.

Robotic Technology Applications. The end use to which the technology is put. Within the Army, robotic technology is subdivided into the following major requirements categories.

- Autonomous Vehicles. Vehicles with an autonomous vision and navigation capability. This application requires significant developments in vision technology, as well as artificial intelligence for route planning and the accommodation of unexpected contingencies. These capabilities are significantly beyond the current state of the art. This is one of the reasons why the Defense Advanced Research Projects Agency (DARPA) selected autonomous vehicles as a test bedding area. Once developed, these systems will have a wide range of potential applications, but their dependence on technology, which is well beyond the present state of the art, removes them from serious consideration as near-term transition from tech base candidates. In the near term, teleoperation (remote control) has been proposed as an accessible alternative; however, the viability of the C³ link to the vehicle is highly tentative, and, in the case of tethered systems range, is severely limited. In any event, opportunities for systems of the teleoperated type more clearly appear in the Battlefield Systems category and will be addressed there.

- Materials Handling Systems - Field Oriented. Tech base requirements for robotic materials handling systems exist in areas such as sensor systems which will permit accommodation to environmental uncertainties, e.g., part positioning orientation, object recognition, etc. These requirements, though substantially more severe than the parallel requirements in the industry, are

made less risky due to the opportunities to constrain problem areas, e.g., one can program a vision system to recognize a relatively limited set of ammunition pallets in all stable configurations. Similar requirements for structural optimization of robot manipulators and grippers, as well as system computer controllers, exist. Technology to support most application requirements is either currently available (may still present system integration challenges) or could be developed at low to moderate risks through a focused tech base effort. These systems share a virtually common ground within the group tech base, i.e., the tech base to support an ammunition handling system would also be directly supportive of NBC decontamination applications and robotic vehicle refueling systems. Additional tech base issues include multifunctional end effectors (grippers), manipulator designs optimized kinematically and dynamically (incorporating advanced composite materials for improved payload to weight ratios), and integrated actuators to increase system efficiency, and reduce weight and vulnerability.

Battlefield Systems. Interest in the Battlefield Systems category should focus on systems without requirements for autonomous platforms. The high risk tech base required for autonomous vehicles properly places these systems in a separate category. A variety of non-autonomous vehicle based systems have been proposed and found to have substantial bases of interest, if not funding, in the Navy and Air Force. Army interest in these systems has focused on applications which involve teleoperation of heavy combat engineer vehicles for mine clearing operations (of which the ROBAT vehicle is a prime example) or much smaller systems, fixed or mobile, with a light weapon and/or sensor payload. The tech base for these systems is more diverse than that required for either of the above categories and is low to moderate risk in nature, depending on the specific application. Some of the key technical issues involved include low cost all weather vision, compact energy sources, fire control and discipline and moving target indicators. Many of the intermediate milestone tech products which are produced through the programs associated with the Autonomous Vehicle program will find application in the Battlefield Systems, e.g., advanced teleoperators and path planning navigation assistance. The Battlefield Systems application category provides more appropriate test-bed opportunities for these stepping stone technologies than the Autonomous Vehicle category since, if proven on a well chosen system with end item transition potential, transition into system acquisition can be expedited. This is in contrast to proposed autonomous vehicle technology demonstrations on systems which are developed as test-bed end items.

A key technical consideration which spans all three application categories is the assessment of man-machine task/function allocation. The appropriate apportioning of tasks to autonomous subsystems and system operators will ensure the

earliest possible transition from the tech base. The systems with requirements for the highest level of autonomy require the most tech base work and require substantially greater research and development resources and development times than those which, when feasible, utilize human operator involvement. Supervisory control (whereby an operator exerts direct control over a system only in the event of nonprogrammed contingencies) is a critical feature of optimum resolution which is a prerequisite for the most efficient pooling of operator and machine capabilities. Trade-off analyses based on these parameters will govern fielding costs and development times for the foreseeable future.

Industrial Applications. The current robotics technology effort within the US Air Force is oriented entirely towards the industrial applications, particularly the maintenance and repair of aircraft. The US Navy program is also focused primarily on manufacturing and includes several major robotic projects oriented towards the cleaning, repair and maintenance of ships and submarine hulls and operating equipment. Within the AMC, the industrial application of robotics is managed within the Manufacturing Methods and Technology (MAN TECH) program and is oriented primarily towards the depot maintenance and repair activities. It represents approximately 13% of the AMC 5-Year Robotics Program. Table 1 shows the industrial applications funding by Service by fiscal year.

TABLE 1

Industrial Applications Funding By Service
By Fiscal Year (Dollars In Thousands)

Service	FY84	FY85	FY86	FY87	FY88	FY89
Army	206	405	317	550	0	0
Navy	5,325	4,500	40,551	800	0	0
Air Force	12,741	9,648	8,776	4,068	2,000	2,000

METHODOLOGY

The Statement of Work called for a query of the Navy RAID, Defense Technical Information Center (DTIC) and NASA Technical Information Analysis Centers to obtain DoD Form 1498 and related information from such sources relative to the Army, Navy, and Air Force Research and Development efforts in robotics, including past, current and planned projects. These data were to be filtered to weed out that information pertaining purely to AI which was to be excluded from the effort. The data were then to be reviewed and clarified through personal visits and/or telephone discussions

with the data sources concerned.

Because of the results of the sampling of the RAID data base and based on a review of the information provided through a query of DTIC, it was determined that a onetime survey of the Services would be required to obtain a current and complete status of all robotic surveys. A survey form was developed, coordinated with USAHEL and forwarded to the Services for completion. The data resulting from this survey was used as the primary source for information which is contained in this report. The information was entered into a computer data base developed by ASI and the output of this program was used to develop the management displays and briefing charts which follow.

SCOPE OF SURVEY

Within the US Army, survey forms were forwarded to the four AMC corporate laboratories, the Army Research Office, the 27 separate major subordinate command laboratories, the Test and Evaluation Command, the Medical R&D Command, the Engineer Topographic Laboratory, the Development and Deployment Agency, and the Defense Advanced Research Projects Agency for a total of 39 requests for completion of survey forms. Responses were received from 37 organizations which represents a 95% response. Replies were not received from the Atmospheric Sciences Laboratory, White Sands Missile Range, NM, or the Electronics Technology and Devices Laboratory, Ft. Monmouth, NJ.

Survey forms were also forwarded to central points of contact for the US Navy, the US Marine Corps, and the US Air Force.

Appendix A contains a copy of the survey form and instructions for its preparation. Appendix B contains a copy of each of the Army, Navy, and Air Force individual computer printouts. TAB B-1 contains a summary printout of total Army financial data followed by individual summaries of projects and tasks by designated technology areas and technology application areas. Inasmuch as the Army portion of the survey results was also planned for use by the USAHEL as input for a briefing to the Deputy Commanding General for Research, Development and Acquisition, AMC, separate printouts were also provided for each performing AMC organization, to include the major AMC subordinate commands and the separate corporate laboratories. A listing of each robotic project/task by each AMC organization was also provided and is included as part of TAB B-1.

TAB B-2 contains a summary printout of the total US Navy portion of the survey, including a financial summary followed by individual summaries of projects and tasks by designated technology and technology applications and TAB B-3 contains similar information for all US Air Force robotics projects.

RESULTS AND DISCUSSION

As shown in Table 2, a total of 32 separate organizations, excluding DARPA, are presently working on 95 separate projects. DARPA funded projects are shown as part of the respective military Services' submissions.

TABLE 2

Scope of Survey

Service	No. of Organizations W/Robotic Projects	No. of Project Reports Received
Army	18	52
Navy	9	27
Air Force	5	16

Table 3 is a list of military Service organizations with active, ongoing robotics projects.

Figures 1 through 8 are a series of DoD funding projections by total In-House versus Contract; Technology Base versus System Specific by Service; Research, Development, Testing and Evaluation (RDT&E) Funding Categories; Technology Base versus System Specific; Percent Effort in FY85 stratified by Component Technology; Robotic Component Technologies stratified by Service; total DoD Technology Applications for FY85 projects, and 1985 robotics projects broken out by primary technology applications by Service.

Figures 9 through 18 provide similar displays of robotics projects for the AMC plus a separate portrayal of Manufacturing Methods and Technology (MMT) funding.

TABLE 3

Military Service Organizations
With Ongoing Robotic Projects

Army	Navy	Air Force
USA Electronics R&D Cmd. Night Vision & Elec. Opt. Lab. Signal Warfare Center Combat Surv. & Tgt. Acqu. Lab. USA Missile Command Lab. USA Troop Support Cmd. Belvoir R&D Ctr. USA Tank-Automotive Cmd. Systems Lab. Concept Lab. USA Aviation Systems Cmd. PM RPV Program Applied Tech. Lab. USA Armament, Mun. & Cml. Cmd. Armament R&D Center Chemical R&D Center USA Commo. & Elec. Cmd. Ctr. for Communications US Army Research Office USA Medical R&D Command USA Engr. Topo. Lab. USA Dev. & Employment Agcy. USA Human Engr. Lab. USA Matls. & Mechs. Res. Ctr.	Naval Sea Systems Cmd. Naval Air Systems Cmd. Naval Ocean Systems Ctr. Naval Research Lab Naval Surface Wpns. Ctr. Naval Coastal Sys. Ctr. Naval Post Grad. School Naval Weapons Center USMC Dev. & Ed. Cmd.	USAF Systems Cmd. USAF Rocket Propulsion Lab, Edwards AFB USAF Ofc. of Scientific Research USAF Wal/MLTC Wright- Pat. AFB USAF Armament Div., Eglin AFB Hanscom AFB, Mass.

DOD ROBOTICS PROJECTS

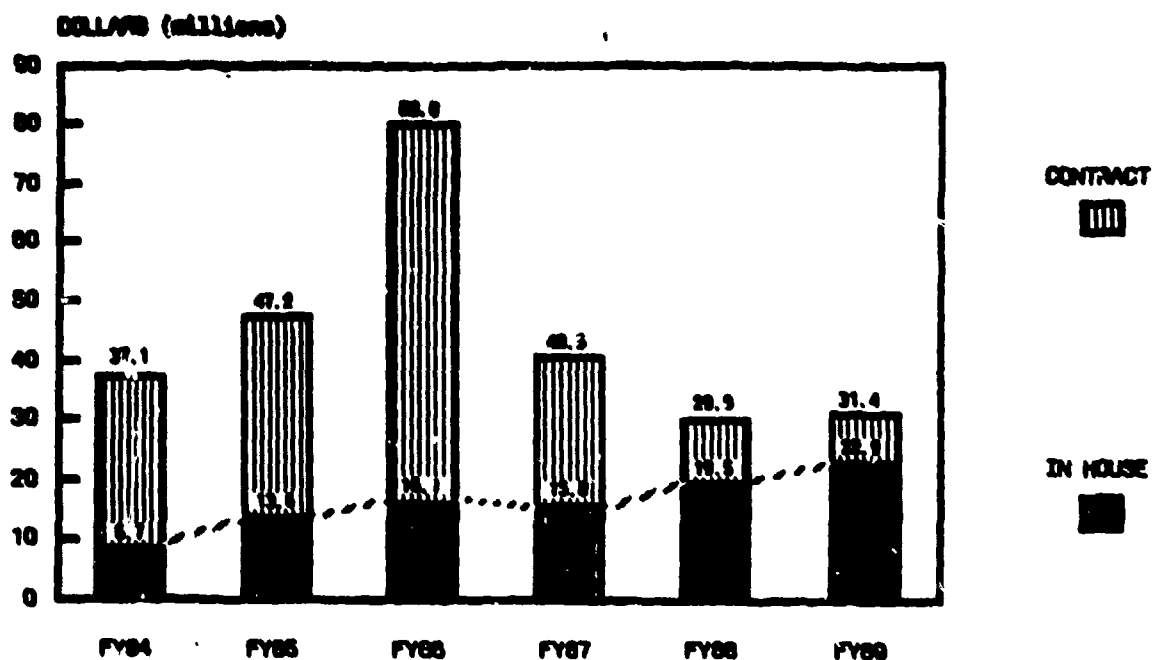


Figure 1. Total R&D Robotic Funding--In-House Versus Contract.

DOD ROBOTICS PROJECTS

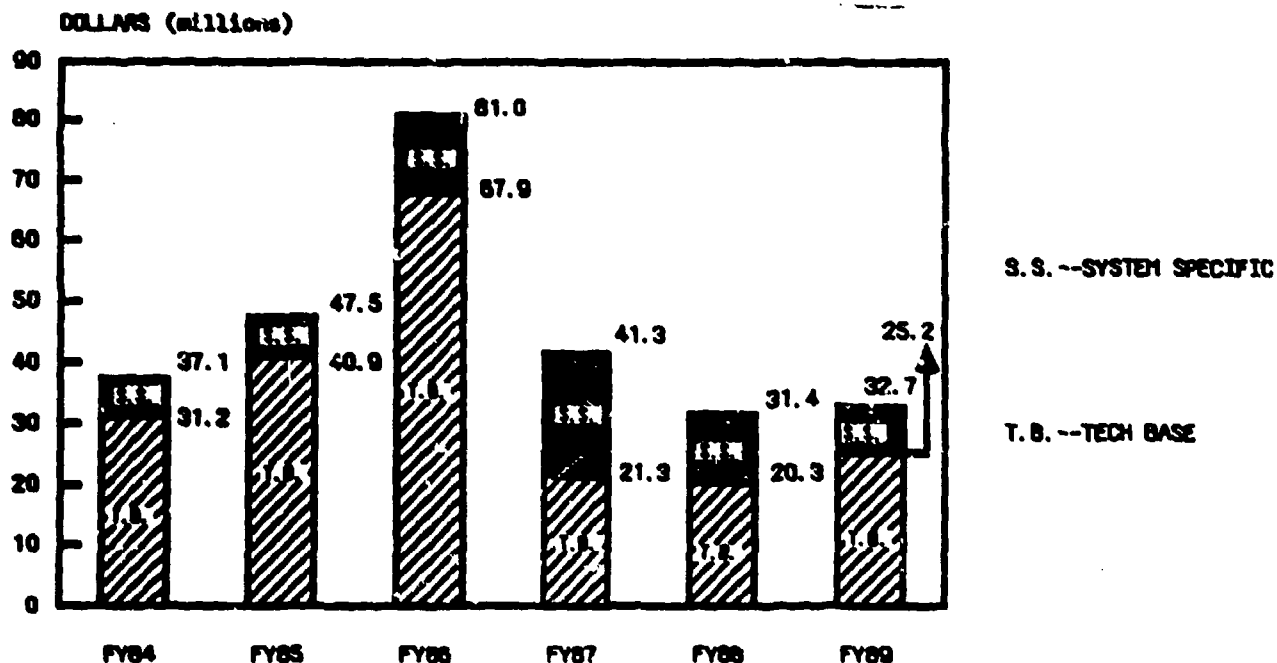


Figure 2. Total DoD Technology Base Versus System Specific.

DOD ROBOTICS PROJECTS

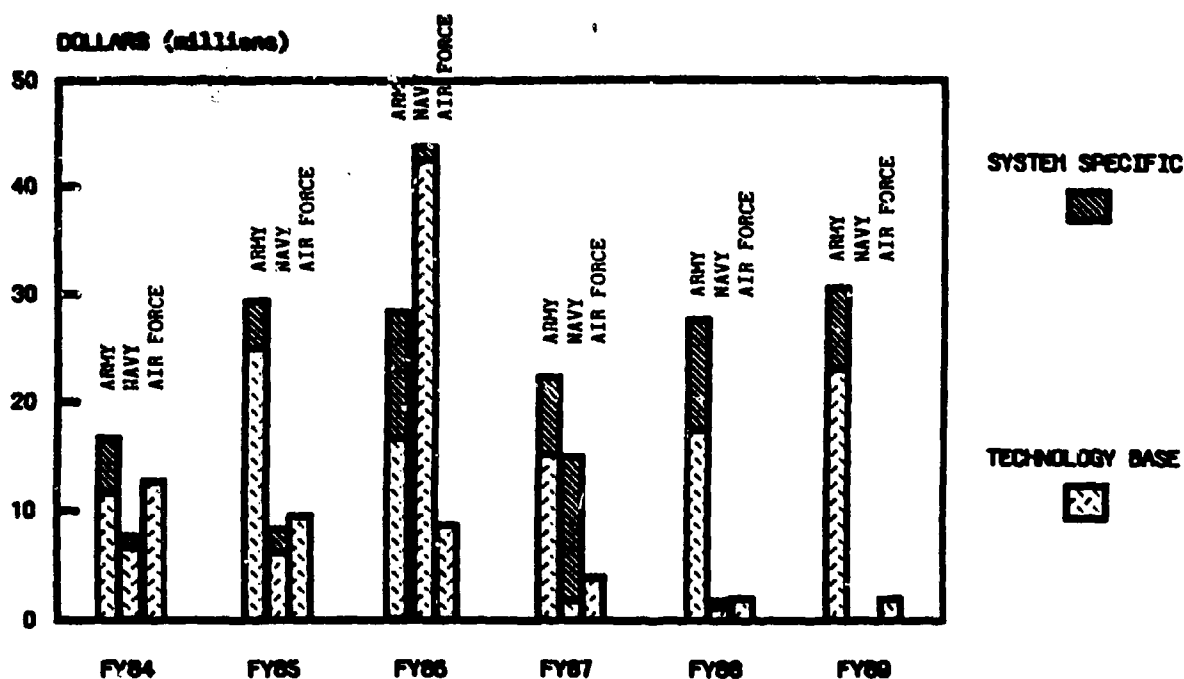


Figure 3. Technology Base Versus System Specific By Service.

DOD ROBOTICS PROJECTS

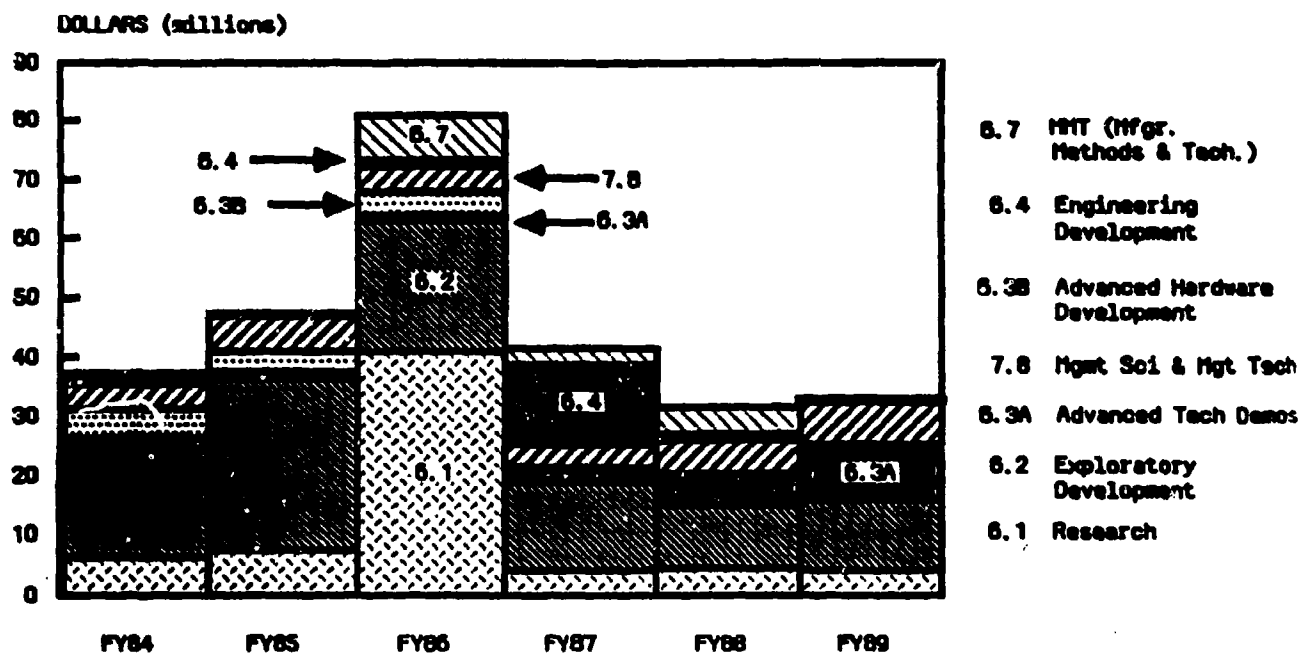


Figure 4. Total DoD RDT&E Funding Categories.

DOD ROBOTICS PROJECTS

TOTAL DOD

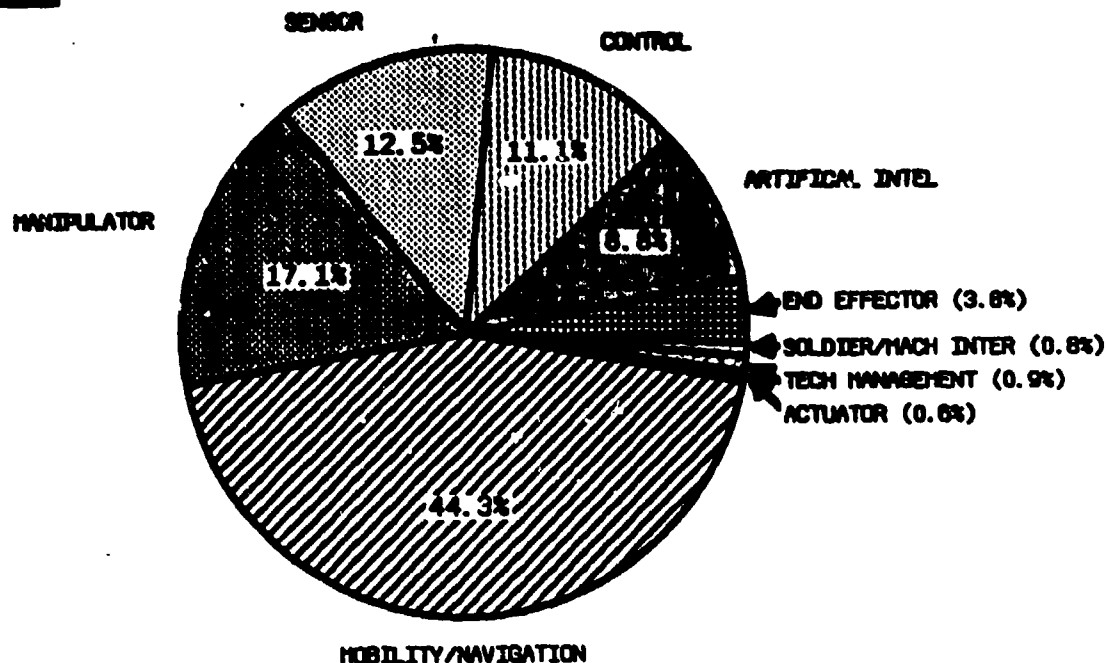


Figure 5. Component Technology (Percent Effort FY85).

DOD ROBOTICS PROJECTS

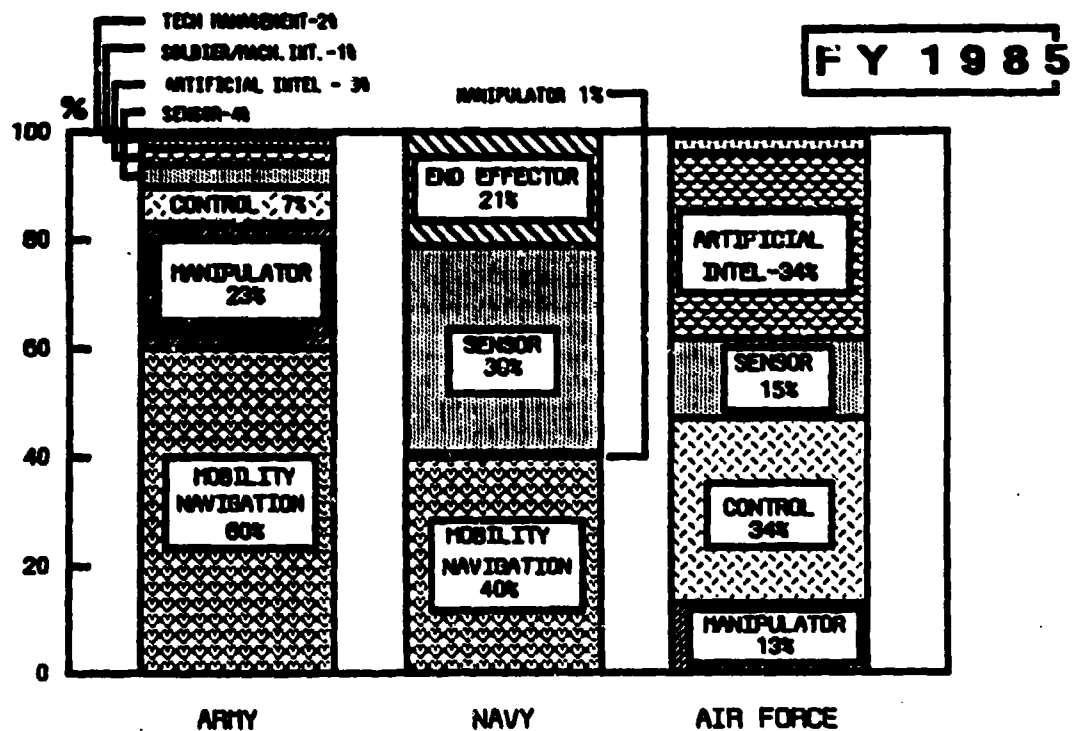


Figure 6. Robotic Component Technologies By Service.

TECHNOLOGY APPLICATIONS

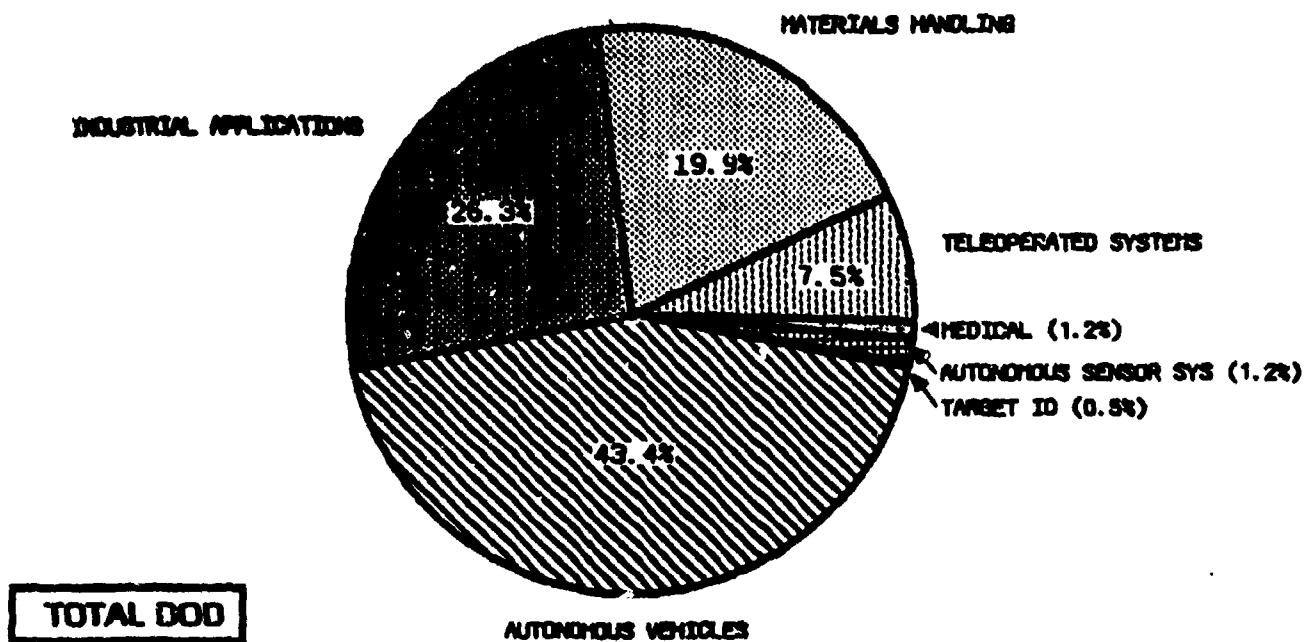


Figure 7. DoD Technology Applications--1985 Projects.

DOD ROBOTICS PROJECTS

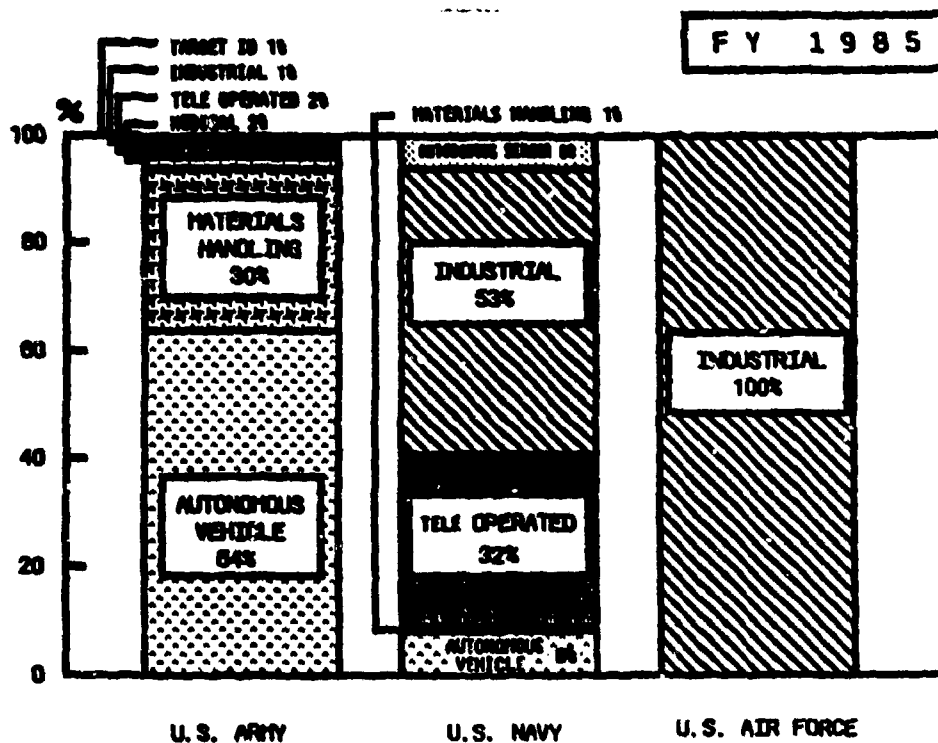


Figure 8. Primary Technology Applications By Service.

AMC ROBOTICS PROJECTS

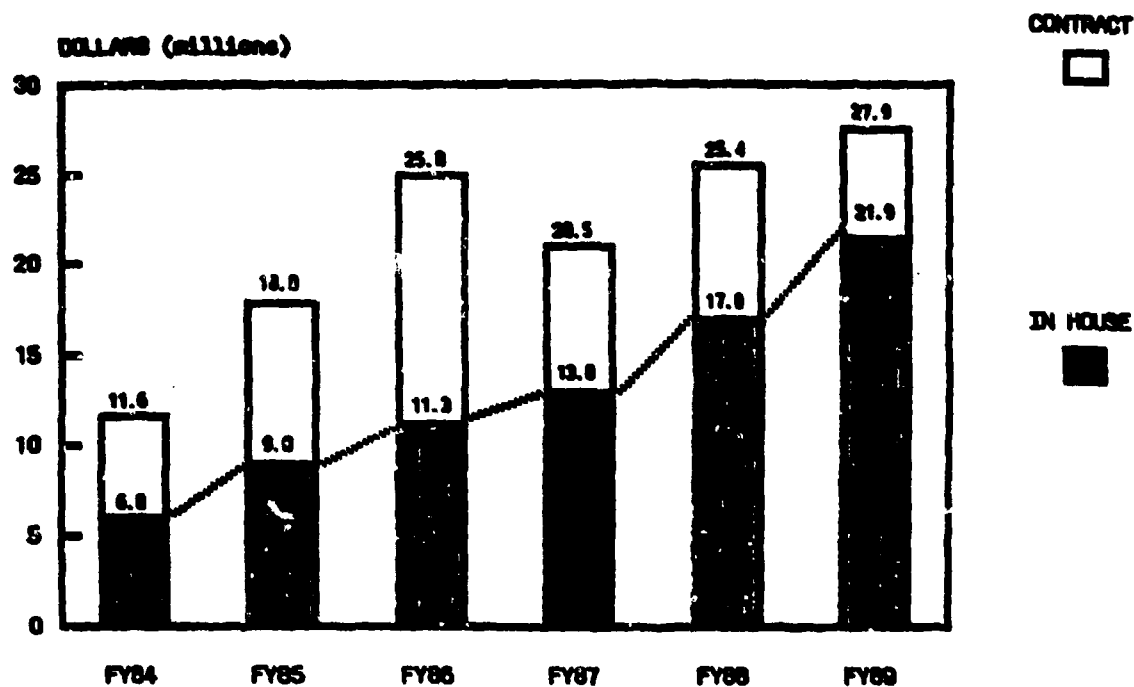


Figure 9. AMC Robotics Projects--In-House Versus Contract.

AMC ROBOTICS PROJECTS

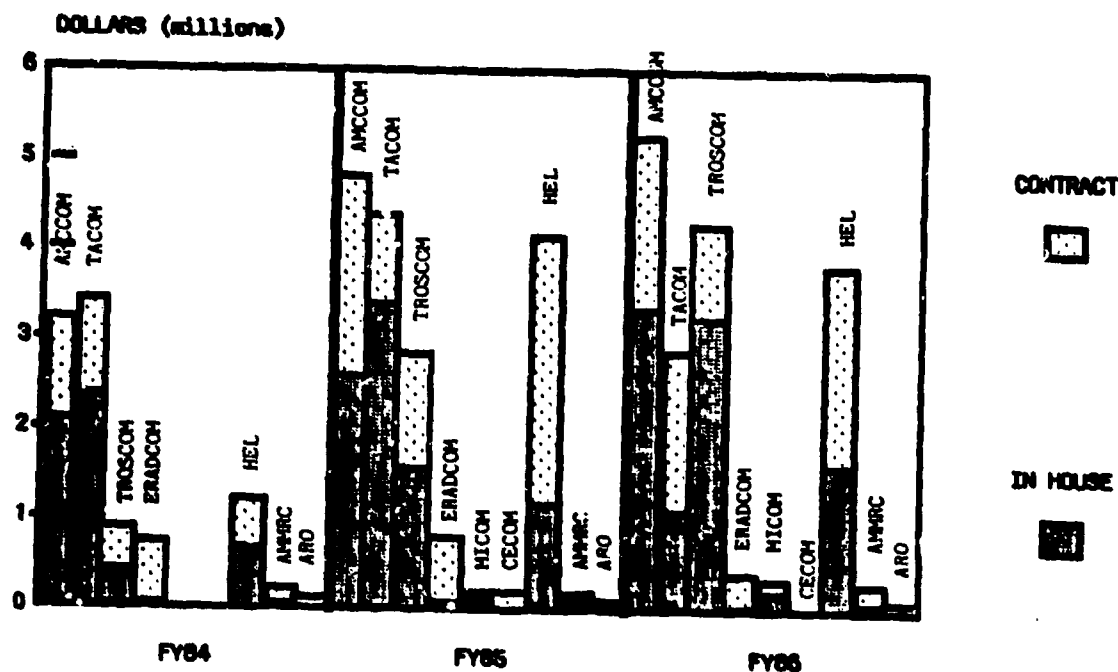


Figure 10. AMC Robotics Projects--In-House Versus Contract--MSC Breakout.

AMC ROBOTICS PROJECTS

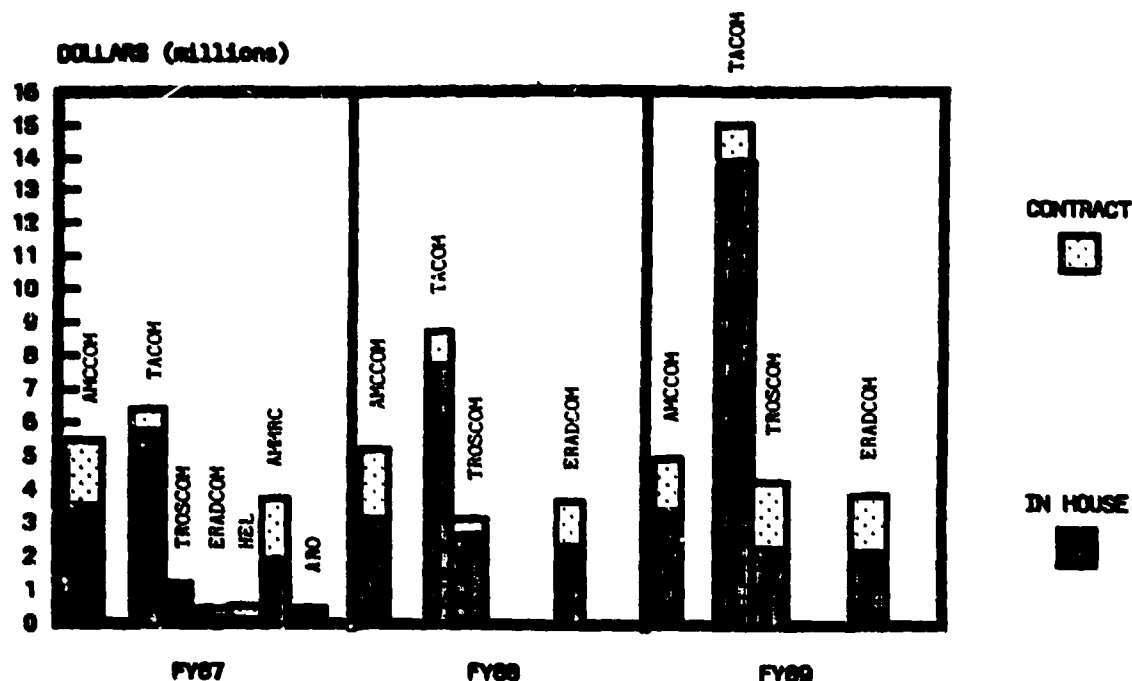


Figure 11. AMC Robotics Projects--In-House Versus Contract--MSC Breakout (Cont'd.).

AMC ROBOTICS PROJECTS

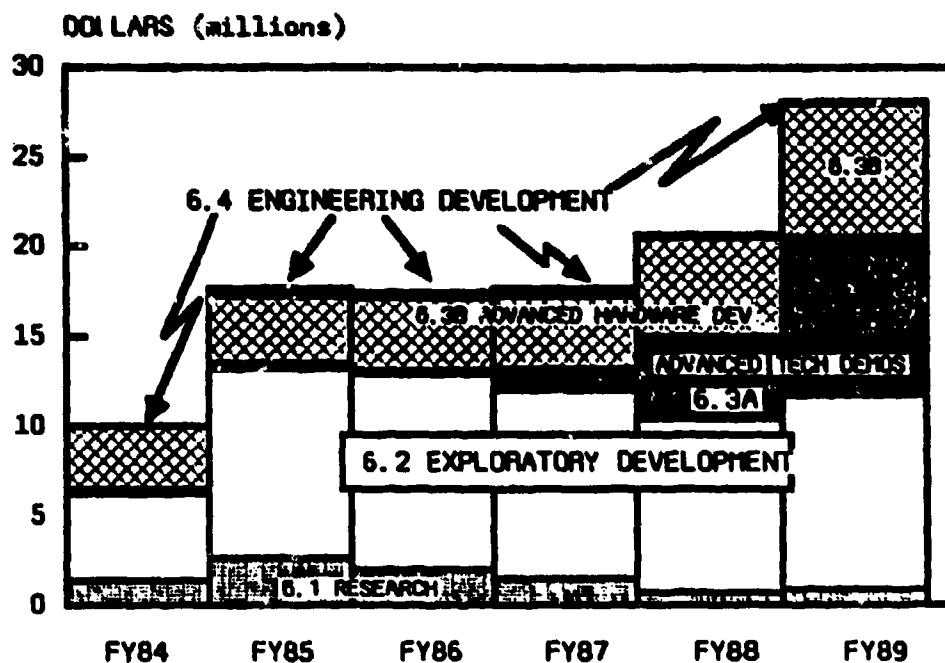


Figure 12. AMC Projects By RDT&E Funding Categories.

AMC ROBOTICS PROJECTS

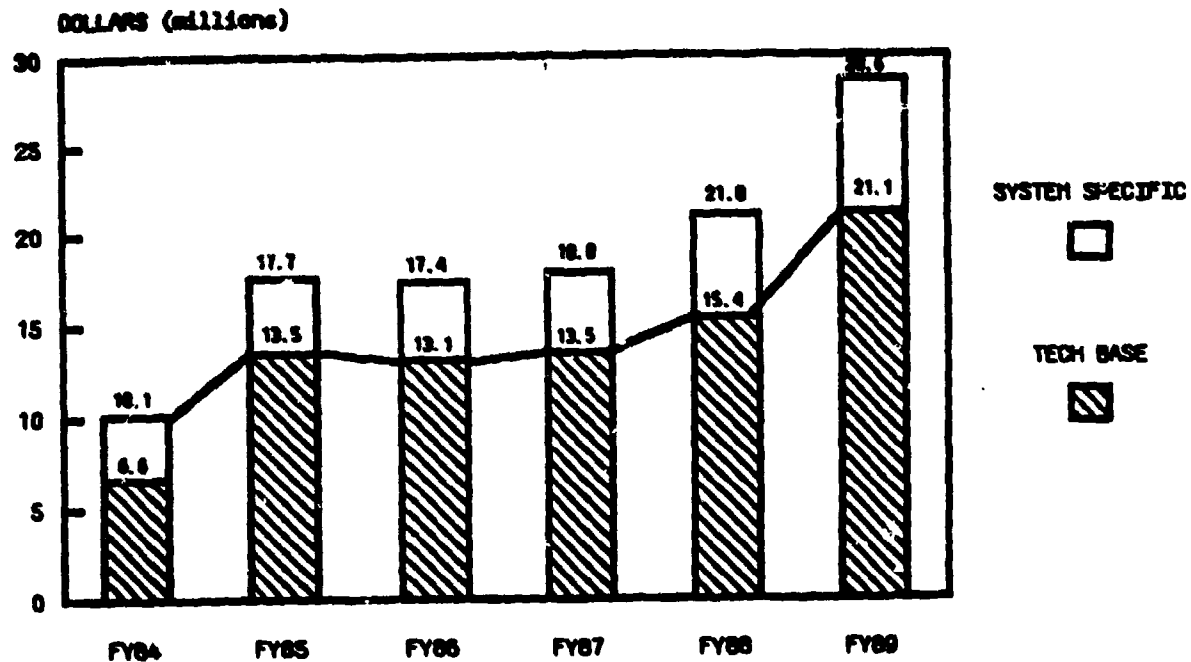


Figure 13. AMC Robotics Projects--Technology Base Versus System Specific.

COMPONENT TECHNOLOGY

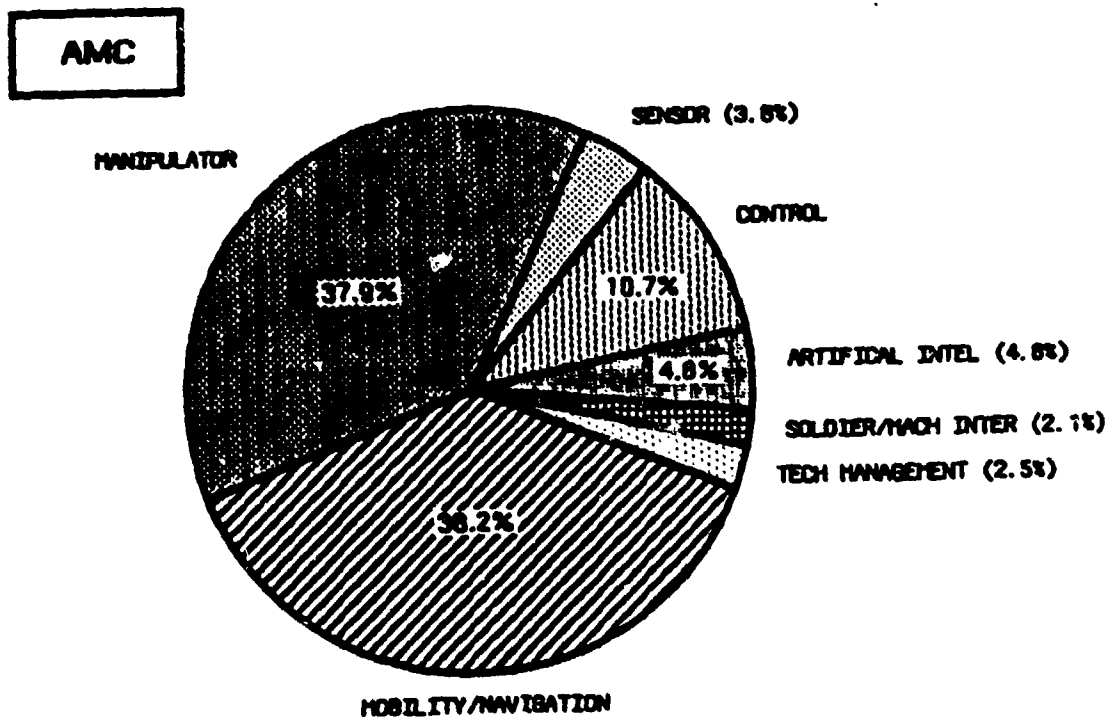


Figure 14. AMC Component Technology Percent Effort--FY85 Projects.

TECHNOLOGY APPLICATIONS

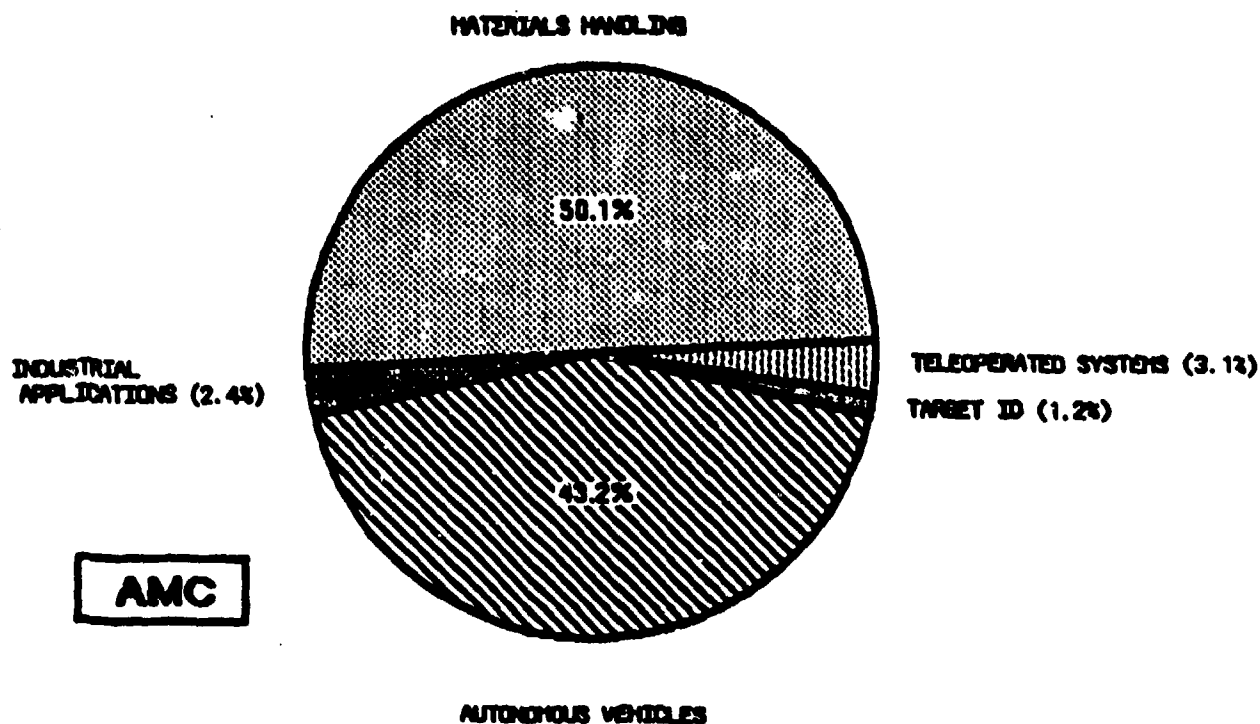


Figure 15. AMC Technology Applications (FY95 Projects).

AMC ROBOTICS PROJECTS

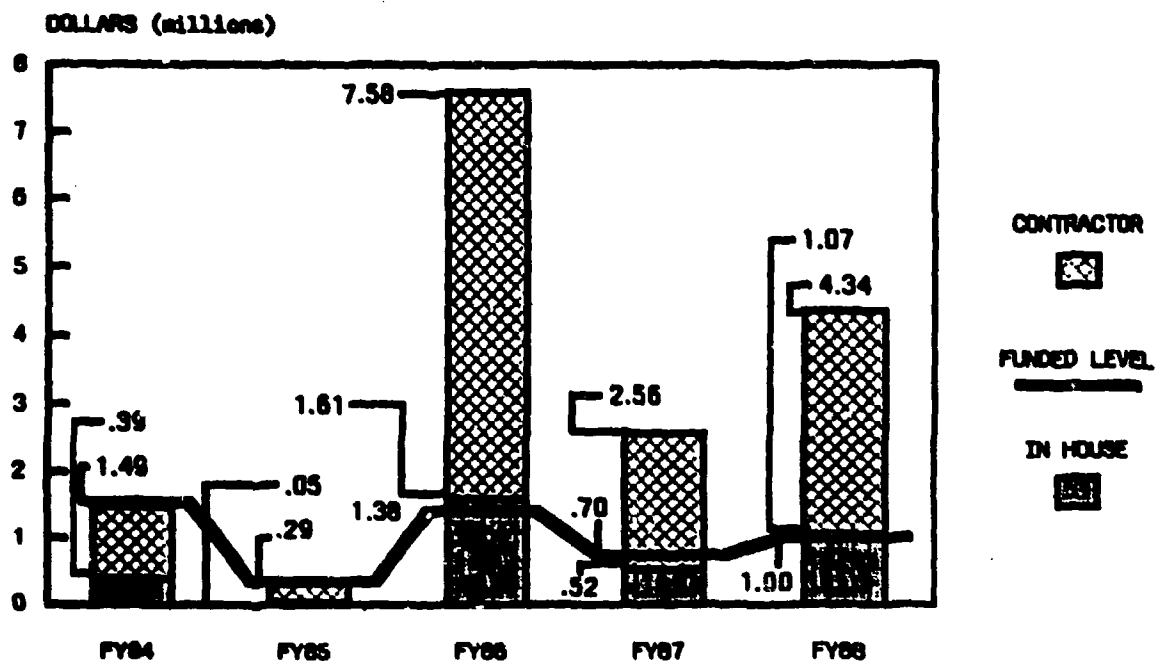


Figure 16. MMT Funding--AMC Robotics Projects.

ROBOTICS MMT FUNDING

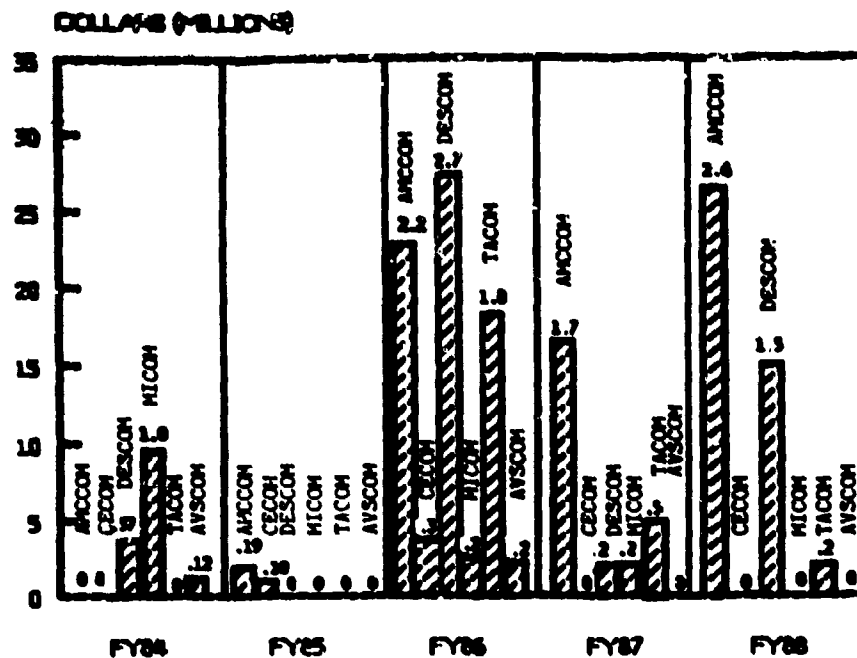


Figure 17. MMT Funding By AMC Major Subordinate Commands.

AMC ROBOTICS PROGRAM

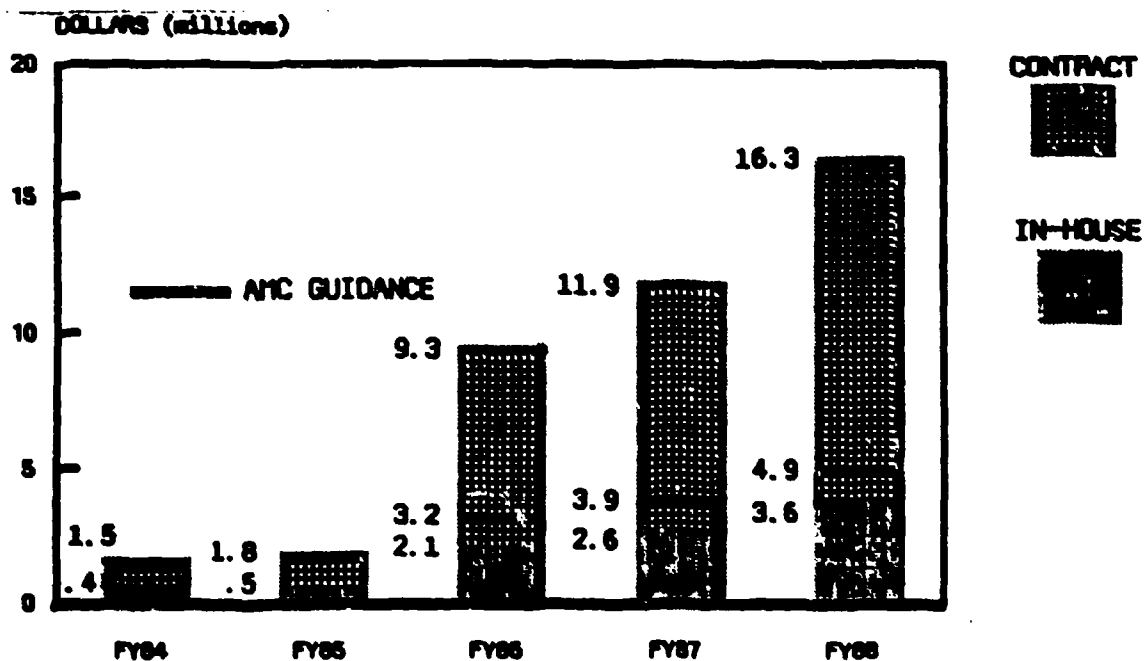


Figure 18. MMT, Cumulative Funding, AMC Robotics Projects--In-House Versus Contract.

Table 4 is a project title listing of Joint-Service projects with lead and supporting Service(s) as shown.

TABLE 4

Joint Service Projects

Reference Number	Project Title
A-85-20	Multimission Robotics - Light Mobile Robotic System (LMRS). Lead: US Army, Supporting: US Navy.
N-84-12	Robotic Microwave Hybrid Substrate Assembly. Lead: US Navy, Supporting: US Air Force.
N-84-17	Laser Paint Stripper. Lead: US Navy, Supporting: US Air Force and US Army.
N-84-18	Automated Aircraft Paint System. Lead: US Navy, Supporting: US Air Force.
N-85-26	Advanced Teleoperators. Lead: US Marine Corps, Supporting: US Navy and US Army.
F-85-13	General Purpose Robotic System. Lead: US Air Force, Supporting: US Army.

One of the questions on the survey form asked whether or not a DoD Form 1498 had been completed for each robotic project. It was interesting to note that out of the 52 project submissions by the US Army, only 24 or 46% reported that the required DoD Form 1498 had been completed. Of the 27 projects reported by the Navy, DoD Form 1498 had been completed on only 5 or 19%. None of the 16 projects reported by the US Air Force had the required DoD Form 1498 submitted.

SUMMARY OF SURVEY FINDINGS

Although the referenced task did not include a requirement for reporting any survey conclusions or recommendations, it was interesting to note that:

- Of the Army's 52 robotics projects, only two are funded in FY85 at a level in excess of one million dollars and only four in FY86.

- There is an apparent wide interest in autonomous-teleoperated vehicles in that there are 14 separate AMC projects in FY85 for a total funding of \$7.1 million which are concerned with autonomous-teleoperated vehicles.

- Of the 52 projects reported by the Army as active during the period 1984-1989, only nine projects show transition funding into 6.3B Advanced Hardware Development by FY89 and only three show 6.4 Engineering Development funds, which total only \$1.3 million, or less than 1% of the \$133.9 million total AMC robotics program FY84 - FY89.

- Based on a cursory review of the individual robotic survey submissions, there is an apparent overlapping of test bed efforts.

LESSONS LEARNED

- Based on the small number of projects (29 out of 95) wherein it was reported that DoD Form 1498 had been completed, as required by DoD Directive 7720.13, it is a very unreliable and misleading indicator of the robotics projects being performed by the military Services.

- Based on the extensive delays experienced in the completion of the survey forms by all three Services, notwithstanding the extensive follow-up effort put forth, it is apparent that future surveys to update the robotics data base will be ineffective and inefficient. Since the DoD Form 1498 is also ineffective as a source of information for updating a robotic data base, an alternative would be to establish a recurring report to obtain the specific data input requirements needed for the continued effective management and control of the DoD robotics program.

- Inasmuch as many technology base projects provide support to several basic technology areas, as well as having multitechnology applications, an improved taxonomy methodology is required to properly catalogue the projects so that they will be more supportive of robotic literature searches for related robotics work.

- Although the originally designed computer software program outputs were responsive in terms of satisfying the basic management display requirements, it has been determined that with minor modifications, significant improvements in providing timely ancillary information in support of management needs can be provided. These software modifications, when interfaced with a computer graphics program will make possible the timely publication of periodic technical progress and resource information report to enhance the robotics program decision making process at all levels of management. Armament Systems, Inc. (ASI) has started to make these software modifications and should have

them completed in the near future.

FUTURE CONSIDERATIONS

A. If the Director, USAHEL is to serve for another year as Chairman of the JTPR, immediate action is required to obtain approval for a recurring report to provide timely information required by the JTPR to fulfill the requirements of its charter, i.e., identification of program duplications and overlaps, identification of program voids, and the identification of programs of questionable value in terms of satisfying high priority weapons and system requirements.

B. Whether or not the HEL Robotic Integration Center (ROBIC) data base is to include information for other Services in support of any suggested actions taken, stated in the previous paragraph, or be limited to AMC projects, there is a need to incorporate TRADOC requirements information in support of the AMC RDT&E robotics projects. Only then can the proper management control be maintained.

C. If future ROBIC activities are to include information in support of JTPR chartered functions, recommend immediate action be taken to establish a procedure (recurring report or similar requirement) for obtaining timely information on all of the Services' robotics activities, as well as an awareness of current and planned robotics projects of other federal departments.

D. If future ROBIC activities are to be limited to the AMC robotics projects, future contractor support should be accomplished as a task under the existing contract.

E. If, as a result of ongoing robotic briefings, it is determined that future management briefings will be required on a continuing basis, a requirement should be identified for a set of standard briefing charts so that the data input requirements can be developed and a computer graphics program refined to provide timely information with minimum expenditure of time and effort.

F. Inasmuch as several agency and activity letters which transmitted robotic survey data requested feedback, in terms of overall program status be provided, recommend this be accomplished as a priority effort as a means of encouraging improvements in support of future robotic program efforts.

APPENDIX A

Survey Form and Instructions

ROBOTICS PROGRAM SURVEY

1. PROJECT TITLE: _____
2. PROJECT NO. _____
3. TASK TITLE _____
4. SEC. CLASSIF. _____
5. Performing Organization (Service, Command/Agency)

Name: _____

Address: _____

Telephone Numbers: Autovon: _____ Commercial: _____

6. Principal Investigator's Name: _____

Address: _____

Telephone Numbers: Autovon: _____ Commercial: _____

7. FYDP Funding (RDT&E) Thousands (000) of Dollars

	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>	<u>FY 87</u>	<u>FY 88</u>	<u>FY 89</u>
6.1	_____	_____	_____	_____	_____	_____
6.2	_____	_____	_____	_____	_____	_____
6.3 A	_____	_____	_____	_____	_____	_____
6.3 B	_____	_____	_____	_____	_____	_____
6.4	_____	_____	_____	_____	_____	_____

8. FYDP Funding (6.1-6.4)
 - In House _____
 - Contract _____
9. In House Man Years _____
10. Unfunded: (Funds requested [or planned] but approval not yet received [6.1-6.4])
 - In House _____
 - Contract _____
11. List the appropriate component technology that this task falls under (6.1-6.3A only) (see Enclosure 1. for list of technologies). _____
12. List the appropriate Robotic Technology Application (6.3B-6.4 funds only) (see Enclosure 1. for list of applications). _____
13. Has this project been reported under the DoD Form 1498 Research and Technology Work Unit Summary? () yes, () no. If yes, provide Accession No. _____ and latest revision date _____.
14. Is this a Joint Service project? () yes, () no. If yes, which service has the lead? _____ What other Services are involved? _____
15. If funds for this project are fully or partially provided by DARPA, indicate amount of the funding and percent of total project _____ (amount) _____ (percent)

(NARRATIVE CONCISE STATEMENTS)

- 16. OBJECTIVE:**
- 17. DESCRIPTION OF TASK:**
- 18. ACCOMPLISHMENTS: (Including milestones scheduled vs. accomplished):**
- 19. FUTURE PLANS:**

Robotic KEYWORD List

ACTUATOR
ARTIFICIAL INTEL
CONTROL
END EFFECTOR
MANIPULATOR
MAN/MACH INTERFACE
MOBILITY/NAVIGATION
SENSOR

BATTLEFIELD SYS
COUNTERMINE VEHICLE
EXPL ORD DISPOSAL
FIRE FIGHTING
INTELLIGENT MINE
MINEFIELD OPERATIONS
NBC DECONTAMINATION
NBC RECONNAISSANCE
REMOTE SENSOR STA
REMOTELY ACTIV WPN
SENTRY ROBOT
SHIP REPAIR
SHIPBOARD OPERATIONS
SMART MUNITIONS
TACT RECONNAISSANCE

INDUSTRIAL APPL
CLEANING/PAINTING
CUTTING/WELDING
DERIVITING
DESIGN
DIAGNOSTIC
FABRICATION/ASSEMBLY
INSPECTION
QUALITY CONTROL

MATERIAL HANDLING
AMMUNITION RESUPPLY
AUTO AMMO SUP POINT
CARGO HANDLING
CARGO LOADING
REFUELING

STUDY/SURVEY
SHIPBOARD APPL

TRAINING

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

DESCRIPTION OF MODULE INPCHK OUTPUT
***** ** ***** *****

LABEL *****	DESCRIPTION *****
REFERENCE No.	Generated by ROBOTIC INFO. SYSTEM
KEY No.	Key numbers corresponding to Keywords (see enclosed sheet)
PROJECT Title	Self Explanatory (SE)
PROJECT No.	As assigned by the Performing Organization
CLASSIFICATION	SE
TASK Title	SE
PERFORMING ORG.	SE
PO ADDRESS	SE
FUNDING	SE
MAN YEAR(s)	In-house reported for FY84-FY89
WORK UNIT SUM	Accession Number and latest revision date "***" indicates that none has been reported
JOINT PROJECT	Joint Service Project; A - ARMY N - NAVY F - AIR FORCE First letter in field = LEAD Service Remaining letter(s) = SUPPORT Service "+++" indicates single Service Project
DARPA Funding	\$ (in thousands) and Percentage of Project's funding

APPENDIX B

Robotic Survey Individual Computer Printouts

TAB B-1. Summary Printout: Army

TAB B-2. Summary Printout: Navy

TAB B-3. Summary Printout: Air Force

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:05:38

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 11
 KEY No: 1 11 1431 1 01
 PROJECT Title: 1AI/ROBOTICS SPF
 PROJECT No: 11L161102AHS1CA
 CLASSIFICATION: 1UC1
 TASK Title: 1SENSORS/ROBOTICS/AI
 PERFORMING ORG: 1TROSCOM
 PO ADDRESS: 1BRDC FT BELVOIR VA 22060-5626

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	212	371	343	320	400	425
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	212	127	127	127	127	127
CONT	0	244	216	193	273	298

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 1.61 1 1.61 1 1.61 1 1.61 1 1.61
 WORK UNIT SUM: 1 1 1 1 1 1
 JOINT PROJECT: 1+++1
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:05:58

MODULE: INFCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 21
 KEY No: 1 51 1 91 1 21
 PROJECT Title: ITUNNELS/SENSORS
 PROJECT No: 11L62733AM20XS 1
 CLASSIFICATION: IUC1
 TASK Title: IROBOTICS SENSORS TECHNOLOGY
 PERFORMING ORG: ITROSCOM
 PO ADDRESS: IBRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	375	154	168	270	380
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	85	154	168	150	200
CONT	0	290	0	0	120	180

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 1.01 1 1.01 1 1.01 1 2.51 1 3.01
 WORK UNIT SUM: 1 1 1
 JOINT PROJECT: 1+++1
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:06:20

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 31
KEY No: 1 81 1 91 1171
PROJECT Title: 1SUPPLY REDISTRIBUTION
PROJECT No: 11L62733AH20GS 1
CLASSIFICATION: 1UC1
TASK Title: 1REPALLETIZER, BOXED AMMUNITION
PERFORMING ORG: 1TROSCOM
PO ADDRESS: 1BRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	751	920	1200	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	751	920	1200	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 1 1 1 1 1 1
JOINT PROJECT: 1++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:06:41

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 41
KEY No: 1 31 1 91 1:71
PROJECT Title: LOGISTICS
PROJECT No: 163726DG1421 1
CLASSIFICATION: UCI
TASK Title: 1BATTLEFIELD ROBOTIC AMMUNITION SUPPLY 1
PERFORMING ORG: 1TROSCOM 1
PO ADDRESS: 1BRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	2400	5557
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	2400	5557
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:07:03

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 51
KEY No: 1 81 1 91 1171
PROJECT Title: 1SUPPLY DISTRIBUTION
PROJECT No: 11L2733AH20GS 1
CLASSIFICATION: 1UC1
TASK Title: 1REPALLETIZER PROJECTILES
PERFORMING ORG: 1TROSCOM
PO ADDRESS: 1BRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	50	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [5.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	50	0	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(\$): 1 0.01 1 0.61 1 0.01 1 2.01 1 0.01 1 0.01
WORK UNIT SUM: 1 1 1 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:07:24

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 6
KEY No: 1 81 1 91 117
PROJECT Title: LOGISTICS
PROJECT No: 163726DG1420
CLASSIFICATION: UCI
TASK Title: BATTLEFIELD ROBOTIC AMMO SUPPLY SYSTEM
PERFORMING ORG: ITROSCOM
PO ADDRESS: 1BRDC FT BELVOIR VA 22060-3606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	1600	3684	1000	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	1600	3684	1000	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 2.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:08:26

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 71
KEY No: 1 31 1 91 1171
PROJECT Title: LOGISTICS
PROJECT No: 164717DH1A20 1
CLASSIFICATION: UCI
TASK Title: BRASS (CRUNCHER P)
PERFORMING ORG: ITROSCOM
PO ADDRESS: IBRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	825
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	825
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: {*****} {*****}
JOINT PROJECT: {+++}
DARPA Funding: 1 0 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:10:05

MODULE: INCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 81
KEY No: 1 31 1 91 1 01
PROJECT Title: ISUPPLY DISTRIBUTION
PROJECT No: 11L62733AH20GS 1
CLASSIFICATION: IUC1
TASK Title: 1AUTOMATED STORAGE/INVENTORY CONTROL
PERFORMING ORG: 1TROSCOM
PO ADDRESS: 1BRDC FT BELVOIR VA 22060-3606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	360	1500
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	360	1500
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 1*****1 *****
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:10:27

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 91
KEY No: 1 81 1 91 1171
PROJECT Title: LOGISTICS
PROJECT No: 163776D814XX
CLASSIFICATION: UCI
TASK Title: ROBOTIC UNLOADER
PERFORMING ORG: ITROSCOM
PO ADDRESS: 1BRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	2000	1000
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	2000	1000
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:10:48

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 101
KEY No: 1 11 1431 1 01
PROJECT Title: ICOUNTERMINE SPF
PROJECT No: 11L161102AH51RN 1
CLASSIFICATION: IUCI
TASK Title: IMINE NEUTRALIZATION RESEARCH
PERFORMING ORG: ITROSCOM
PO ADDRESS: IBRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	150	150	100	90	150	93
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	29	30	30	20	30	20
CONT	121	120	70	70	120	73

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(\$): 1 0.41 1 0.41 1 1.21 1 0.31 1 0.41 1 0.31
WORK UNIT SUM: 1 1 1 1 1 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:14:02

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 111
KEY No: 1 11 1431 1 01
PROJECT Title: IMINE NEUTRALIZATION SPEF
PROJECT No: 11L62733AH20NN 1
CLASSIFICATION: IUCI
TASK Title: ICOUNTERMINE ROBOTICS
PERFORMING ORG: ITROSCOM
PO ADDRESS: IBRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	360	566	500	600	700
6.3A	0	0	0	0	0	0
6.3R	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	80	80	120	160	160
CONT	0	280	486	380	440	540

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 0.01 1.01 1.01 1.51 2.01 2.01
WORK UNIT SUM: 1 1 1
JOINT PROJECT: ++++
DARPA Funding: 01 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:14:23

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 121
KEY No: 1 11 1431 1 01
PROJECT Title: ICOUNTERMINE ADVANCED DEVELOPMENT
PROJECT No: 11L63606D60832 1
CLASSIFICATION: UCI
TASK Title: ICOUNTERMINE ROBOTICS SYSTEMS
PERFORMING ORG: ITROSCOM
PO ADDRESS: IBRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	200	1550	4500
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	200	1550	4500
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 1 1 1 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:14:44

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 131
KEY No: 1 11 1431 1 01
PROJECT Title: IMINEFIELD DETECTION, NEUTRALIZATION MARKING
PROJECT No: 1A624010220C01
CLASSIFICATION: IUCI
TASK Title: REMOTE CONT. MINEFIELD BRCHG VEH
PERFORMING ORG: ITROSCOM
PO ADDRESS: IBRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E 1] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	465	90	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

*****>*****

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:15:06

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 141
KEY No: 1 51 1 91 1 01
PROJECT Title: ICOUNTERMINE ADVANCED & ENGINEERING DEVELOPMENT PROGRAM
PROJECT No: 11L63606D608XX 1
CLASSIFICATION: IUCI
TASK Title: IROBOTIC CONSTRUCTION EQUIPMENT
PERFORMING ORG: ITROSCOM
PO ADDRESS: IBRDC FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	200	400
CONT	0	0	0	0	600	1100

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:15:27

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 151
 KEY No: 1 51 1 91 1 01
 PROJECT Title: 1AERONAUTICAL TECHNOLOGY (MISSION SUPPORT EQUIPMENT)
 PROJECT No: 11L162209AH76F 1
 CLASSIFICATION: IUC1
 TASK Title: 1ADV ACFT MAINT HANDLING EQUIPMENT 1
 PERFORMING ORG: 1AVSCOM 1
 PO ADDRESS: 1FT EUSTIS VA 23604-5577 1

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	230	310	520
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	50	60	70
CONT	0	0	0	180	250	450

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEPR(s): 1 0.01 1 0.01 1 0.01 1 0.51 1 0.51 1 0.51
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

13-MAR-85
12:15:49

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 161
KEY No: 1 11 1181 1431
PROJECT Title: ISTRATEGIC COMPUTING PROGRAM
PROJECT No: 14E20
CLASSIFICATION: 1 1
TASK Title: I AUTONOMOUS LAND VEHICLE/IMAGE UNDERSTDG I
PERFORMING ORG: IAETL
PO ADDRESS: IFT BELVOIR VA 22060-5546

FYDP FUNDING [ROT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	3950	9950	1200	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	250	350	400	0	0	0
CONT	3700	9600	800	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 2.01 1 5.01 1 6.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 11 1100.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:16:11

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 171
KEY No: 111 1181 1431
PROJECT Title: SMART TERRAIN ANALYSIS FOR ROBOTIC SYSTEMS (STARS)
PROJECT No: 1
CLASSIFICATION: IUCI
TASK Title: AUTOMATIC ROUTE PLANNING TECHNOLOGIES
PERFORMING ORG: IAETL
PO ADDRESS: 1 FT BELVOIR VA 22060-5606

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	453	600	500	275	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	150	450	350	200	0	0
CONT	303	150	150	75	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 1.91 1 5.51 1 5.11 1 1.91 1 0.01 1 0.01
WORK UNIT SUM: 1DA300636 1 110/01/84 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:16:32

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 181
KEY No: 1 11 1181 1431
PROJECT Title: ITANK-AUTOMOTIVE TECHNOLOGY
PROJECT No: 11L162601AH91
CLASSIFICATION: IUCI
TASK Title: ISENSING & AI FOR COMBAT VEHICLE ROBOTICS
PERFORMING ORG: ITACOM
PO ADDRESS: IWARREN MI 48090

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	30	700	700	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	200	200	0	0	0
CONT	30	500	500	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 2.01 1 2.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:16:54

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 191
KEY No: 1 31 1291 1 01
PROJECT Title: ROBOTICS FOR EVALUATING NBC RESISTANT MATERIALS
PROJECT No: 1
CLASSIFICATION: 1 1
TASK Title: RESHAPE
PERFORMING ORG: IAMMRC
PO ADDRESS: WATERTOWN MA 02172

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	55	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	55	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 0.0 0.01 0.01 0.01 0.01 0.01
WORK UNIT SL 1 104 NOV 84
JOINT PROJECT: + + +
DARPA Funding: 01 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:17:15

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 201
KEY No: 1 11 1181 1431
PROJECT Title: MULTIMISSION ROBOTICS
PROJECT No: 1A64301
CLASSIFICATION: IUCI
TASK Title: ILIGHT MOBILE ROBOTIC SYSTEM (LMRS)
PERFORMING ORG: IADEA
PO ADDRESS: IFT LEWIS, WA 98433-5000

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	205	125	200	225	225	225
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	205	125	200	225	225	225

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 1.51 1 1.51 1 1.51 1 1.51 1 1.51 1 1.51
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: 1AN 1
DARPA Funding: 1 501 1 2.51

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:19:15

MODULE: INOCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 211
KEY No: 1 31 1181 1431
PROJECT Title: INV ADVANCED DEVELOPMENT
PROJECT No: 1DK70
CLASSIFICATION: UCI
TASK Title: 1AUTONOMOUS VISION SYSTEM (3)
PERFORMING ORG: 1ERADCOM
PO ADDRESS: 1INVEOL FT BELVOIR VA 22060

FYDD FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	1000	2500	2000
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDD FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-4	0	0	0	1000	2500	2000
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-4	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 1*****1 *****1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 2.51

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:18:39

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 221
KEY No: 1 11 11A1 1431
PROJECT Title: 1ADVANCED CONCEPTS
PROJECT No: 11L16:2709DH95DD 1
CLASSIFICATION: 1UC1
TASK Title: 1INTELLIGENT TACTICAL AUTONOMOUS CONTROL 1
PERFORMING ORG: 1ERADCOM
PO ADDRESS: 1NVEOL FT BELVOIR VA 22060-5677

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	270	60	110	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	12	10	10	0	0	0
CONT	258	50	100	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	10	50	50	10
CONT	0	0	200	950	1150	490

MAN YEAR(s): 1 0.21 1 0.21 1 0.21 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 1DA304353 1 1MARCH 1984
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 2.51

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:19:01

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 231
KEY No: 1 11 1181 1431
PROJECT Title: ISMART SENSOR RESEARCH
PROJECT No: 11L161102A31B00 1
CLASSIFICATION: 1UC1
TASK Title: 1AUTONOMOUS VEHICLE NAVIGATION
PERFORMING ORG: 1ERADCOM
PO ADDRESS: 1INVEOL FT BELVOIR VA 22060-5677

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	415	410	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	10	10	0	0	0	0
CONT	405	400	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	10	20	20	20
CONT	0	0	290	580	580	580

MAN YEAR(s): 1 0.21 1 0.21 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 1DA301027 1 1FEB 1984 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 8251 1 8.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:19:23

MODULE: INACKK

SERVICE: ARMY

REFERENCE No: 1A-85- 241
KEY No: 1 51 1291 1371
PROJECT Title: IPROD. ENGR. MEAS. (DEM) PROJECT
PROJECT No: 12853139
CLASSIFICATION: IUC1
TASK Title: I AUTO INTEROVEN TRANS. OF GLASS PREFORMS
PERFORMING ORG: ICECOM
PD ADDRESS: IFT MONMOUTH NJ 07703

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	200	0	400	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	200	0	400	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(\$): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 8.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:19:44

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 251
KEY No: 1 31 1181 1421
PROJECT Title: VITAL SIGNS MONITOR AND COMMUNICATOR
PROJECT No: 1
CLASSIFICATION: 1 1
TASK Title: 1
PERFORMING ORG: IMRDC
PO ADDRESS: 1FT DETRICK FREDERICK MD 21701-5012

FYDP FUNDING (RDT&E) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	495	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	500	500	500	500	500
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING (6.1-6.4) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	495	500	500	500	500	500

UNFUNDED (6.1-6.4) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 8.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
 ROBOTIC INFORMATION SYSTEM

15-MAR-85
 12:20:06

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 261
 KEY No: 1 11 1181 1431
 PROJECT Title: ROBOTICS (WEAPONS SYSTEM)
 PROJECT No: 1
 CLASSIFICATION: IUCI
 TASK Title: ROBOTIC ANTI ARMOR SYSTEM
 PERFORMING ORG: IMICOM
 PO ADDRESS: REDSTONE ARSENAL AL 35898-5247

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	200	350	300	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	100	200	200	0	0
CONT	0	100	150	100	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 1.01 1 2.01 1 2.01 1 0.01 1 0.01
 WORK UNIT SUM: 1 1 1
 JOINT PROJECT: 1+++1
 DARPA Funding: 1 01 1 8.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:20:27

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 271
KEY No: 1 31 1291 1 01
PROJECT Title: SCIENTIFIC PROBLEMS WITH MILITARY APPLICATIONS
PROJECT No: 11L161102BH5706 1
CLASSIFICATION: IUCI
TASK Title: ICLASS. OF SINGLE & MULTI D-O-F MOTIONS 1
PERFORMING ORG: IARO 1
PO ADDRESS: IUNIV OF WISCONSIN-MADISON MADISON WISC 53706 1

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	36	39	42	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	36	39	42	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: IN/A 1 14 DEC 84 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:20:49

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-83- 281
KEY No: 1 51 1291 1 01
PROJECT Title: SCIENTIFIC PROBLEMS WITH MILITARY APPLICATIONS
PROJECT No: 11L161102BHS706 1
CLASSIFICATION: UCI
TASK Title: ICREAT. MECHANISMS: SEPAR. KINEMATICS 1
PERFORMING ORG: IARO 1
PO ADDRESS: ICOLUMBIA UNIV NEW YORK NY 10027 1

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	60	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	60	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 2.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 106 9624 1 124 OCT 84 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:21:11

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 291
KEY No: 1 51 1 91 1 01
PROJECT Title: (SCIENTIFIC PROBLEMS WITH MILITARY APPLICATIONS
PROJECT No: 11L161102BH5706 1
CLASSIFICATION: IUC1
TASK Title: (DESIGN MECHANISMS: ENTIRE MOTION CHAR. 1
PERFORMING ORG: IARO 1
PO ADDRESS: (STATE UNIV OF NY AT STONY BROOK NY 22794 1

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	46	52	58	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	46	52	58	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: IN/A 1 04 DEC 84 1
JOINT PROJECT: (+++)
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:21:32

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 301
KEY No: 1 31 1 91 1171
PROJECT Title: INTEGRATED SMART ARTILLERY SYNTHESIS
PROJECT No: 11L162603AH18 1
CLASSIFICATION: IUC1
TASK Title: ROBOTIC AUTOLOADER
PERFORMING ORG: IAMCCOM
PO ADDRESS: IARDC DOVER NJ 07801-5001

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	1708	2155	3400	3800	3800	3500
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	1083	1305	1900	2300	2300	2500
CONT	625	850	1500	1500	1500	1000

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 111.61 117.01 130.61 137.11 137.11 140.31
WORK UNIT SUM: [*****] [*****]
JOINT PROJECT: [+++]
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:22:29

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 311
KEY No: 1 71 1 91 1 01
PROJECT Title: INATURAL LANGUAGE INTERFACE
PROJECT No: 1
CLASSIFICATION: 1 1
TASK Title: 1
PERFORMING ORG: IAMCCOM
PO ADDRESS: IARDC DOVER NJ 07801-5001

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	75	100	100	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	75	60	60	0	0
CONT	0	0	40	40	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:22:53

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 321
KEY No: 1 51 1 91 1 01
PROJECT Title: 1ADVANCED ARMAMENT CONCEPTS
PROJECT No: 1AH18A1
CLASSIFICATION: 1UC1
TASK Title: 1LIGHTWEIGHT AUTOLOADERS
PERFORMING ORG: 1AMCCOM
PO ADDRESS: 1ARDC DOVER NJ 07801-5001

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	305	250	245	230	245	245
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	255	200	200	190	200	210
CONT	50	50	45	40	45	35

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 2.01 1 2.01 1 2.01 1 2.01 1 2.01 1 2.01
WORK UNIT SUM: 1*****1 *****1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:23:14

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 331
KEY No: 1 61 1 91 1 01
PROJECT Title: RESEARCH IN FIRE CONTROL AND SMALL CALIBER ARMAMENTS
PROJECT No: 1AH51
CLASSIFICATION: IUCI
TASK Title: HIERARCHIAL INTELLIGENT CONTROL
PERFORMING ORG: IAMCCOM
PO ADDRESS: IARDC DOVER NY 07801-5001

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	274	365	350	400	0	0
6.2	0	0	0	0	500	500
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	177	197	180	180	180	180
CONT	97	168	170	220	320	320

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	120	250	200	180
CONT	0	0	1400	1800	1800	2320

MAN YEAR(s): 1 2.51 1 3.01 1 3.01 1 3.01 1 3.01 1 3.01
WORK UNIT SUM: 1DA0G9531 1 JUN 1984 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:23:36

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 341
KEY No: 1 51 1 91 1 01
PROJECT Title: 1ADVANCED ARMAMENT CONCEPTS
PROJECT No: 1AH18A1 1
CLASSIFICATION: 1UC1
TASK Title: 1HI-TECH AUTOLOADERS
PERFORMING ORG: 1AMCCOM
PO ADDRESS: 1ARDC DOVER NJ 07801-5001

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	650	900	275	290	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	200	200	275	290	0	0
CONT	450	700	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	500	1000	1200	0	0
CONT	0	300	1000	1200	0	0

MAN YEAR(s): 1 2.01 1 2.01 1 2.01 1 2.01 1 0.01 1 0.01
WORK UNIT SUM: 1*****1*****1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:23:57

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 331
 KEY No: 1 81 1 91 1 01
 PROJECT Title: RESEARCH IN FIRE CONTROL AND SMALL CALIBER ARMAMENTS
 PROJECT No: 1AH61
 CLASSIFICATION: UCI
 TASK Title: ROBOTIC CONTROL
 PERFORMING ORG: IAMCCOM
 PO ADDRESS: IARDC DOVER NJ 07801-5001

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	293	270	300	240	300
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	188	170	170	140	170
CONT	0	105	100	130	100	130

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	50	50	60	50
CONT	0	0	100	150	200	150

MAN YEAR(s): 1 0.01 1 3.01 1 2.51 1 2.51 1 2.01 1 2.61
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:24:19

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 361
KEY No: 1 61 1481 1 01
PROJECT Title: IPARTIAL SHAPE RECOGNITION
PROJECT No: 1
CLASSIFICATION: IUC1
TASK Title: 1
PERFORMING ORG: IAMCCOM
PO ADDRESS: IARDC DOVER NJ 07801-5001

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	194	210	250	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	80	80	250	0	0	0
CONT	114	130	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(\$): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: IDA062807
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:24:41

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 371
KEY No: 1 81 1431 1 01
PROJECT Title: 1ADVANCED ARMAMENT CONCEPTS
PROJECT No: 1AH18A1
CLASSIFICATION: 1UC1
TASK Title: 1ULTRA-LIGHTWEIGHT ARMAMENT SYSTEM
PERFORMING ORG: 1AMCCOM
PO ADDRESS: 1ARDC DOVER NJ 07801-5001

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	350	360	375	380	395	400
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	300	310	320	325	335	340
CONT	50	50	55	55	60	60

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 4.01 1 4.01 1 4.01 1 4.01 1 4.01 1 4.01
WORK UNIT SUM: 1*****1 1*****1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:25:02

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 381
KEY No: 1 51 1181 1431
PROJECT Title: ICB DECONTAMINATION & CONTAMINATION AVOIDANCE
PROJECT No: 11L162706A553F 1
CLASSIFICATION: UCI
TASK Title: IFEBILITY OF AUTOMATED DECON
PERFORMING ORG: IAMCCOM
PO ADDRESS: ICRDC APO MD 21010-5423

FYDP FUNDING (RDT&E) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	200	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING (6.1-6.4) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	50	0	0	0	0
CONT	0	150	0	0	0	0

UNFUNDED (6.1-6.4) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.51 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
02:25:24

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 331
KEY No: 1 81 1 91 1101
PROJECT Title: ADVANCED COMPOSITES FOR THE BRASS 2000 & AGILE AUTO VEH
PROJECT No: 1
CLASSIFICATION: IUCI
TASK Title: 1
PERFORMING ORG: IAMMRC
PO ADDRESS: 1AMXMR-OC WATERTOWN MA 02172-0001

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	124	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	124	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.91 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 124 1100.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:25:45

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 401
KEY No: 1 81 118: 1461
PROJECT Title: TACTICAL EW TECHNIQUES
PROJECT No: 11L162715A904 1
CLASSIFICATION: UCI
TASK Title: EW CRITICAL COMPONENTS
PERFORMING ORG: IERADCOM
PO ADDRESS: ISWL VINT HILL FARMS STATION WARRENTON VA 22186 1

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	75	340	291	196	0	0
6.3A	0	0	0	0	612	2296
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	25	50	25	25	150	320
CONT	50	290	266	171	462	1996

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.31 1 0.51 1 0.31 1 0.31 1 1.51 1 3.01
WORK UNIT SUM: 1 1 1 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:26:49

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 411
 KEY No: 1 31 1 91 1101
 PROJECT Title: MATERIALS HANDLING ROBOTICS TECH BASE
 PROJECT No: 1
 CLASSIFICATION: IUCI
 TASK Title: 1* AS ABOVE *
 PERFORMING ORG: IHEL
 PO ADDRESS: IAPG MD 21005

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	580	425	650	725	950	950
6.3A	100	200	200	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	480	425	525	600	950	950
CONT	200	200	325	125	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	225	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.81 1 1.01 1 1.01 1 1.01 1 1.01 1 1.01
 WORK UNIT SUM: 1DA0G3817 + 1 1
 JOINT PROJECT: 1+++1
 DARPA Funding: 1 1001 1 20.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:27:10

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 421
KEY No: 1491 1 01 1 01
PROJECT Title: ROBOTICS INTEGRATION CENTER
PROJECT No: 1
CLASSIFICATION: IUCI
TASK Title: 1* AS ABOVE *
PERFORMING ORG: IHEL
PO ADDRESS: IARG MD 21005

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	225	445	520	570	620	670
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	100	200	200	200	200	200
CONT	125	245	320	370	420	470

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 1.01 1 2.01 1 2.01 1 2.01 1 2.01 1 2.01
WORK UNIT SUM: 1DA0G9299 + 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:27:31

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 431
KEY No: 1 81 1 91 1 01
PROJECT Title: RESEARCH IN ADVANCED MATERIEL SYS
PROJECT No: 1
CLASSIFICATION: IUCI
TASK Title: 1* AS ABOVE *
PERFORMING ORG: IHEL
PO ADDRESS: 1APG MD 21005

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	100	100	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	100	100	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(*): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 1DA0G3817 + 1 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:27:53

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 441
KEY No: 1 51 1501 1 01
PROJECT Title: 1MANIPULATOR EQUIPPED MOBILE TESTBED RESEARCH PROGRAM
PROJECT No: 1
CLASSIFICATION: 1UC1
TASK Title: 1* AS ABOVE *
PERFORMING ORG: 1HEL
PO ADDRESS: 1APG MD 21005

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	25	325	475	525	700	700
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	50	200	200	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	25	250	475	525	700	700
CONT	50	275	200	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 1.01 1 1.51 1 2.01 1 2.01 1 2.01
WORK UNIT SUM: 1*****1 1*****1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:28:14

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 451
KEY No: 1 71 1 91 1101
PROJECT Title: SOLDIER-ROBOT INTERFACE RESEARCH PROGRAM
PROJECT No: 1
CLASSIFICATION: UCI
TASK Title: 1
PERFORMING ORG: IHEL
PO ADDRESS: IAPG MD 21005

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	150	300	500	600	650	700
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [3.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	75	150	250	300	300	300
CONT	75	150	250	300	350	400

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.51 1 1.51 1 2.51 1 3.01 1 3.01 1 3.01
WORK UNIT SUM: 1DA063817 1 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:28:36

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 461
KEY No: 1 51 1 91 1101
PROJECT Title: FIELD MATERIALS HANDLING ROBOT
PROJECT No: 1
CLASSIFICATION: UCI
TASK Title: 1* AS ABOVE *
PERFORMING ORG: IHEL
PO ADDRESS: 1APG MD 21005

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	2000	1000	1000	500	750
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	2000	1000	1000	500	750

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(S): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:28:58

MODULE: IN-CHK

SERVICE: ARMY

REFERENCE No: 1A-85- 471
KEY No: 1 61 1 91 1131
PROJECT Title: ROBOTICS AI
PROJECT No: 11
CLASSIFICATION: IUCI
TASK Title: RETINA-MODEL ARTIFICIAL VISION SYSTEM
PERFORMING ORG: IHEL
PO ADDRESS: IAPG MD 21005

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	160	0	0	0	0
6.2	0	0	290	0	0	0
6.3A	0	0	0	120	0	0
6.3B	0	0	0	200	160	0
6.4	0	0	0	0	120	120

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	160	180	293	187	80
CONT	0	0	110	27	93	40

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.81 1 0.81 1 1.21 1 0.51 1 0.51
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

15-MAR-85
12:29:19

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 481
KEY No: 1 1 1431 01
PROJECT Title: ROBOTIC OBSTACLE BREACHING ASSAULT TANK (ROBAT)
PROJECT No: 1
CLASSIFICATION: IUCI
TASK Title: 1
PERFORMING ORG: ITACOM
PO ADDRESS: IWARREN MI 48090

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	3390	3682	2188	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	2380	3198	915	0	0	0
CONT	1018	484	1273	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	100	800	0	0	0
CONT	0	900	0	0	0	0

MAN YEAR(s): 0.01 0.01 0.01 0.01 0.01 0.01
WORK UNIT SUM: *****
JOINT PROJECT: +++
DARPA Funding: 01 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:29:41

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 491
 KEY No: 1 11 1431 1 01
 PROJECT Title: ISMALL BUSINESS INOVATED RESEARCH
 PROJECT No: 11L665302MM40 1
 CLASSIFICATION: IUCI
 TASK Title: TERRAIN OBSTACLE AVOIDANCE SYSTEM
 PERFORMING ORG: ITROSCOM
 PO ADDRESS: BRDC FT BELVOIR VA 22060

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	50	200	100	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	50	200	100	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85

12:30:02

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 501
 KEY No: 1 61 1291 1361
 PROJECT Title: HIGH PRODUCTIVITY METAL WORKING
 PROJECT No: 1
 CLASSIFICATION: UCI
 TASK Title: 1
 PERFORMING ORG: IAMMRC
 PO ADDRESS: 1

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	110	111	275	150	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	40	61	75	50	0	0
CONT	70	50	200	100	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	900	0	0	0

MAN YEAR(s): 1 1.01 1 1.01 1 1.01 1 0.51 1 0.01 1 0.01
 WORK UNIT SUM: 1DA301288 1 SEPT 84 1
 JOINT PROJECT: 1+++1
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:25:04

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 11
KEY No: 1 11 1501 1 01
PROJECT Title: IMOBILE ROBOT FOR HAZARDOUS DUTY
PROJECT No: 1
CLASSIFICATION: IUCI
TASK Title: 1
PERFORMING ORG: INSWC
PO ADDRESS: SILVER SPRING MD 20910

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	55	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	5	0	0	0	0	0
CONT	50	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	15	0	0	0	0
CONT	0	150	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.11 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01

WORK UNIT SUM: |*****| |*****|

JOINT PROJECT: |+++|

DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85
15:25:26

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 21
KEY No: 1 41 1291 1371
PROJECT Title: ROBOTICS FOR ASSEMBLY
PROJECT No: 1
CLASSIFICATION: IUCI
TASK Title: ROBOTIC ASSEMBLY TOOLING
PERFORMING ORG: INSWC
PO ADDRESS: SILVER SPRING MD 20910

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	55	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	5	0	0	0	0	0
CONT	50	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	15	0	0	0	0
CONT	0	150	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 0.1 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: | 0 | 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:25:49

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 31
KEY No: 1 81 1291 1371
PROJECT Title: ROBOTICS FOR ASSEMBLY
PROJECT No: 1
CLASSIFICATION: UCI
TASK Title: COMPUTER INTEGRATED WORK CELL
PERFORMING ORG: INSWC
PO ADDRESS: SILVER SPRING MD 20910

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	74	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	7	0	0	0	0	0
CONT	67	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	15	0	0	0	0
CONT	0	150	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.11 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:26:12

MODULE: INPCPK

SERVICE: NAVY

REFERENCE No: IN-85- 41
 KEY No: 1 31 1291 1341
 PROJECT Title: REAL-TIME 3-D COMPUTER VISION
 PROJECT No: 1
 CLASSIFICATION: UCI
 TASK Title: 1
 PERFORMING ORG: INSWC
 PD ADDRESS: SILVER SPRING MD 20910

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	71	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	6	0	0	0	0	0
CONT	65	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	15	0	0	0	0
CONT	0	150	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.11 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |++|
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

14-MAR-85
15:26:43

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 51
KEY No: 1 31 1291 1361
PROJECT Title: IPASSIVE 3-D VISION FOR ROBOTIC APPLICATIONS
PROJECT No: IDMN-84014
CLASSIFICATION: IUC1
TASK Title: 1
PERFORMING ORG: INSWC
PO ADDRESS: ISILVER SPRING MD 20910

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	150	0	0	0	0	0
6.3A	350	350	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	308	250	0	0	0	0
CONT	192	100	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 3.01 1 3.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 1 1 1 1 1 1
JOINT PROJECT: !+++!
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85
15:27:06

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 61
KEY No: 1 01 141 1381
PROJECT Title: ICONFORM: SHIPBOARD ROBOTICS/AUTOMATION APPL. STUDY
PROJECT No: 163564N
CLASSIFICATION: IUC1
TASK Title: 1
PERFORMING ORG: INSWC
PO ADDRESS: SILVER SPRING MD 20910

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	35	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	35	0	0	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	50	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.51 1 0.01 1 0.01 1 0.31 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:27:29

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 71
 KEY No: 1 81 1291 1371
 PROJECT Title: USE OF ROBOTICS IN AUTOMATIC FACTORY ASSEMBLY
 PROJECT No: 1
 CLASSIFICATION: UCI
 TASK Title: MULTIPLE ROBOT APPLICATIONS
 PERFORMING ORG: INSWC
 PO ADDRESS: SILVER SPRING MD 20910

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	55	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	5	0	0	0	0	0
CONT	50	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(S): 1 0.11 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85
15:27:52

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 81
KEY No: 1 01 1411 1431
PROJECT Title: ICONFIRM
PROJECT No: 184-T2B
CLASSIFICATION: IUCI
TASK Title: IROBOTICS
PERFORMING ORG: INAVSEA
PO ADDRESS: IWASHINGTON DC 20362

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	35	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	35	0	0	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	25	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:29:15

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 91
KEY No: 1 01 1501 1291
PROJECT Title: ICONFIRM
PROJECT No: 1
CLASSIFICATION: IUCI
TASK Title: IADV BASE REPAIR SHIP TECH RISK ASSES
PERFORMING ORG: INAVSEA
PO ADDRESS: IWASHINGTON DC 20362

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	25	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	25	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:28:48

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 101
 KEY No: 1 31 1291 1361
 PROJECT Title: ARTICULATING ROBOTICS FOR LASER ASSISTED METALWORKING
 PROJECT No: IDNS 602
 CLASSIFICATION: IUCI
 TASK Title: 1
 PERFORMING ORG: INRL
 PD ADDRESS: WASHINGTON DC 20375

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	2000	2350	4650	800	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	2000	2350	4650	800	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 1.51 1 1.51 1 2.01 1 2.01 1 0.01 1 0.01
 WORK UNIT SUM: IDN191-077 1 115 FEB 84 1
 JOINT PROJECT: 1+++1
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

14-MAR-85
15:29:10

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 111
KEY No: 1 41 1291 1321
PROJECT Title: 1
PROJECT No: IPE62761N 1
CLASSIFICATION: IUCI
TASK Title: INON-CONTACT PRECISION PART PROFILER 1
PERFORMING ORG: INRL 1
PO ADDRESS: WASHINGTON DC 20375 1

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	1600	1800	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	1600	1800	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:29:33

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 121
KEY No: 1 41 1291 1311
PROJECT Title: ROBOTIC MICROWAVE HYBRID SUBSTRATE ASSEMBLY
PROJECT No: IJM404
CLASSIFICATION: IUC1
TASK Title: 1
PERFORMING ORG: INOSC
PO ADDRESS: SAN DIEGO CA 92152

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	620	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	120	0	0	0	0	0
CONT	500	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 1.41 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: IDN488 1 131 MAR 84 1
JOINT PROJECT: INF 1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

14-MAR-85
15:30:04

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 131
KEY No: 1 81 1291 1331
PROJECT Title: ROBOTIC TRANSPARENCY RESTORATION
PROJECT No: IPNA 86-5
CLASSIFICATION: IUCI
TASK Title: 1
PERFORMING ORG: INASC
PO ADDRESS: WASHINGTON DC 20361

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	350	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	25	0	0	0
CONT	0	0	325	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	350	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.51 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85
15:30:26

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 141
KEY No: 1 81 1291 1361
PROJECT Title: COMBUSTION CHAMBER REWORK
PROJECT No: IPNA 86-7
CLASSIFICATION: IUCI
TASK Title:
PERFORMING ORG: INASC
PO ADDRESS: WASHINGTON DC 20351

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	1350	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	50	0	0	0
CONT	0	0	1300	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

1
14-MAR-85
15:30:50

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 151
KEY No: 1 51 1291 1361
PROJECT Title: ITURBINE NOZZLE REMOVAL
PROJECT No: IPNA 86-9 1
CLASSIFICATION: IUC1
TASK Title: 1
PERFORMING ORG: INASC
PO ADDRESS: IWASHINGTON DC 20361

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	751	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	51	0	0	0
CONT	0	0	700	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 1*****1*****
JOINT PROJECT: 1+++1
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:31:13

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 161
 KEY No: 1 51 129 1331
 PROJECT Title: MULTIPLE AUTOMATED SMALL PARTS STRIPPER
 PROJECT No: IPNA 86-24
 CLASSIFICATION: UCI
 TASK Title: 1
 PERFORMING ORG: INASC
 PO ADDRESS: WASHINGTON DC 20361

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	4500	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	50	0	0	0
CONT	0	0	4450	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:31:36

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 171
KEY No: 1471 1291 1331
PROJECT Title: LASER PAINT STRIPPER
PROJECT No: IPNA 86-26
CLASSIFICATION: UCI
TASK Title: I
PERFORMING ORG: INASC
PO ADDRESS: WASHINGTON DC 20361

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	16500	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	100	0	0	0
CONT	0	0	16400	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: INFAL
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:31:59

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 181
KEY No: 1471 1291 1331
PROJECT Title: AUTOMATED AIRCRAFT PAINT SYSTEM
PROJECT No: IPIF 86
CLASSIFICATION: IUCI
TASK Title: I
PERFORMING ORG: INASC
PO ADDRESS: WASHINGTON DC 20361

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	5700	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	300	0	0	0
CONT	0	0	5400	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	5700	0	0	0

MAN YEAR(s): 0.01 0.01 1.01 0.01 0.01 0.01
WORK UNIT SUM: *****
JOINT PROJECT: INF
DARPA Funding: 01 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:32:22

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 191
KEY No: 1 81 1291 1331
PROJECT Title: ROBOTIC SANDER AND POLISHER SYSTEM
PROJECT No: IPIF 86
CLASSIFICATION: IUCI
TASK Title: 1
PERFORMING ORG: INASC
PO ADDRESS: WASHINGTON DC 20361

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	350	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	20	0	0	0
CONT	0	0	330	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	350	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:32:52

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 201
KEY No: 1 11 1501 1 01
PROJECT Title: REMOTE CONTROLLED FIRE FIGHTING PLATFORM
PROJECT No: 1
CLASSIFICATION: UCI
TASK Title: 1
PERFORMING ORG: INSWC
PO ADDRESS: SILVER SPRING MD 20910

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	921	2100	0	0	0	0
6.4	0	0	1200	13000	1100	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	450	1550	900	800	800	0
CONT	471	550	300	12200	300	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: IDN586034 1 101 OCT 84 1
JOINT PROJECT: 1+++1
DARPA Funding: 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:33:14

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 211
 KEY No: 1 31 1291 1331
 PROJECT Title: IROBOT ASSISTED SURFACE PREPARATION AND PAINT
 PROJECT No: IDNS-50005
 CLASSIFICATION: IUC
 TASK Title: FEASIBILITY AND PRELIMINARY DESIGN
 PERFORMING ORG: INSSC
 PO ADDRESS: WASHINGTON DC 20362

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	325	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	212	0	0	0	0	0
CONT	113	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	242	1200	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85
15:33:37

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 221
KEY No: 1 11 1431 1 01
PROJECT Title: UNDERSEA COUNTERMEASURES
PROJECT No: ISF 34-376 1
CLASSIFICATION: ICL1
TASK Title: IRUMIC (REMOTE UNMANNED MCM)
PERFORMING ORG: INCSC
PO ADDRESS: PANAMA CITY FL 32407-5000

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	200	250	200	200	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	100	100	100	100	0	0
CONT	100	150	100	100	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(\$): 1 1.01 1 1.01 1 1.01 1 1.01 0.01 0.01
WORK UNIT SUM: IDN 788001 1 1 OCT 84
JOINT PROJECT: ++++
DARPA Funding: 0 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

1
14-MAR-85
15:34:00

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 231
KEY No: 1 51 1 91 1 01
PROJECT Title: OPTIMAL CONTROL OF ROBOTIC MECHANISMS
PROJECT No: 1
CLASSIFICATION: UCI
TASK Title: 1
PERFORMING ORG: INPSFRP
PO ADDRESS: INAVL POSTGRADUATE SCHOOL MONTEREY CA 93943

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	62	38	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	62	38	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15134123

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 241
KEY No: 1 1 1501 1 01
PROJECT Title: AIRBORNE REMOTELY OPERATED DEVICE (AIRD)
PROJECT No: 162712CF12-134
CLASSIFICATION: IUC
TASK Title: IUC
PERFORMING ORG: IMDEC
PO ADDRESS: INTEL DIV DEV CTR QUANTICO VA 22134

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	200	236	300	325	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	160	146	300	325	0	0
CONT	40	90	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 1.01 1 1.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: 1*****1 (*****
JOINT PROJECT: 1+++)
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

14-MAR-85
15:34:52

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 251
KEY No: 1 31 1511 1 01
PROJECT Title: IROBOTIC SENSOR
PROJECT No: 162712CF12-134 1
CLASSIFICATION: IUCI
TASK Title: 1
PERFORMING ORG: IMCDEC
PO ADDRESS: INTEL DIV DEV CTR QUANTICO VA 22134

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	500	900	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	500	900	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(\$): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:35:15

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 261
 KEY No: 1 1 1501 1 01
 PROJECT Title: ADVANCED TELEOPERATORS
 PROJECT No: 162712CF12-134 1
 CLASSIFICATION: UCI
 TASK Title: 1
 PERFORMING ORG: IMDEC
 PO ADDRESS: INTEL DIV DEV CTR QUANTICO VA 22134

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	395	335	300	230	288	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	395	335	300	230	288	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(S): 1 1.51 1 1.51 1 1.51 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: IMNAI
 DARPA Funding: 1 01 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

14-MAR-85

15:35:38

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 271
 KEY No: 1 11 1431 1 01
 PROJECT Title: GROUND SURVEILLANCE ROBOT
 PROJECT No: 162712CF12-134 1
 CLASSIFICATION: UCI
 TASK Title: 1
 PERFORMING ORG: IMCDEC
 PO ADDRESS: INTEL DIV DEV CTR QUANTICO VA 22134

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	490	426	410	360	350	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	480	426	410	360	350	0
CONT	10	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 3.01 1 0.01 1 0.01 1 0.01 1 2.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

29-JAN-85

14156120

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 11
KEY No: 1 81 1291 1 01
PROJECT Title: IMATERIALS
PROJECT No: 12306/A3
CLASSIFICATION: IUCI
TASK Title: IMANUFACTURING SCIENCES
PERFORMING ORG: IAFOSR/NE
PC ADDRESS: IBOLLING AFB DC 20332-6448

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	2300	2300	2000	2000	2000	2000
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	357	500	750	1000	1000
CONT	2300	1943	1500	1250	1000	1000

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 1.31 1 1.51 1 2.01 1 2.51 1 2.51
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

29-JAN-85
14:56:42

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 21
KEY No: 1 31 1291 1371
PROJECT Title: AUTOMATED AIRFRAME ASSEMBLY
PROJECT No: 124180129
CLASSIFICATION: IUCI
TASK Title: INTELLIGENT TASK AUTOMATION
PERFORMING ORG: IAFWAL/MLTC
PO ADDRESS: WRIGHT-PATTERSON AFB OH 45433

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	1426	261	852	1163	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	1426	261	852	1163	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	700	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	1540	128	1936	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 37021 1 51.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

29-JAN-85
14:57:06

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 31
KEY No: 1 31 1291 1371
PROJECT Title: AUTOMATED AIRFRAME ASSEMBLY
PROJECT No: 128650006
CLASSIFICATION: IUCI
TASK Title: IFLEXIBLE ASSEMBLY SUBSYSTEMS
PERFORMING ORG: IAFWAL/MLTC
PO ADDRESS: IWRIGHT-PATTERSON OH 45433

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.3 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	169	635	323	66	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

29-JAN-85
14:57:29

MODULE: INPCHK
SERVICE: AIR FORCE

REFERENCE No: IF-85- 41
KEY No: 1 31 1291 1371
PROJECT Title: AUTOMATED AIRFRAME ASSEMBLY
PROJECT No: 128651002
CLASSIFICATION: IUCI
TASK Title: IFLEXIBLE ASSEMBLY SUBSYSTEMS
PERFORMING ORG: IAFWAL/MLTC
PO ADDRESS: IWRIGHT=PATTERSON OH 45433

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	174	473	687	253	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++!
DARPA Funding: 1 01 1 0.01

U. S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

29-JAN-85

14:58:03

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 51
KEY No: 1 61 1291 1311
PROJECT Title: AUTOMATED AIRFRAMES ASSEMBLY
PROJECT No: 14587000
CLASSIFICATION: UCI
TASK Title: INTELLIGENT TASK AUTOMATION
PERFORMING ORG: IAFWAL/MLTC
PO ADDRESS: WRIGHT-PATTERSON OH 45433

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	1516	1128	1548	500	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	1516	1128	1548	500	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	1568	2000	900	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 46921 1 51.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

29-JAN-85

14:58:26

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 61
KEY No: 1 21 1291 1371
PROJECT Title: AUTOMATED AIRFRAME ASSEMBLY
PROJECT No: 145870001
CLASSIFICATION: IUCI
TASK Title: ROBOTIC MICROACTUATORS 11
PERFORMING ORG: IAFWAL/MLTC
PO ADDRESS: WRIGHT-PATTERSON OH 45433

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	269	300	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	269	300	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 0.01 0.01 0.01 0.01 0.01 0.01
WORK UNIT SUM: |*****|*****|
JOINT PROJECT: |+++|
DARPA Funding: 5691 1100.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

29-JAN-85

14:58:49

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 71
 KEY No: 1 81 1291 1371
 PROJECT Title: 1AUTOMATED AIRFRAME ASSEMBLY
 PROJECT No: 12306/A3
 CLASSIFICATION: IUCI
 TASK Title: 1COORD RESCH IN ROBOTICS & INTEG MFG
 PERFORMING ORG: 1AFWAL/MLTC
 PU ADDRESS: 1WRIGHT-PATTERSON OH 45433

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	1000	1000	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	1000	1000	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

29-JAN-85

14:59:13

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 81
 KEY No: 1 51 1291 1371
 PROJECT Title: AUTOMATED AIRFRAME ASSEMBLY
 PROJECT No: 12306/A3
 CLASSIFICATION: IUC1
 TASK Title: ICTR OF EXCELLENCE IN AEROSPACE MFG AUTO
 PERFORMING ORG: IAFWAL/MLTC
 PO ADDRESS: IWRIGHT-PATTERSON OH 45433

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	1000	1000	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	1000	1000	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 01 1 0.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

29-JAN-85

14:59:40

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 91
 KEY No: 1 51 1291 1371
 PROJECT Title: AUTOMATED AIRFRAME ASSEMBLY
 PROJECT No: 145050000
 CLASSIFICATION: UCI
 TASK Title: END POINT CONTROL OF FLEXIBLE ROBOTS
 PERFORMING ORG: IAFWAL/MLTC
 PD ADDRESS: WRIGHT-PATTERSON OH 45433

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	370	63	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	370	63	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 4331 1100.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

29-JAN-85

15:00:03

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 101
 KEY No: 1 51 1291 1 01
 PROJECT Title: AUTOMATED AIRFRAME ASSEMBLY
 PROJECT No: 130055036
 CLASSIFICATION: IUCI
 TASK Title: KINEMATICALLY REDUNDANT MANIPULATORS
 PERFORMING ORG: IAFWAL/MLTC
 PO ADDRESS: WRIGHT-PATTERSON OH 45433

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	185	185	30	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	185	185	30	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: |+++|
 DARPA Funding: 1 01 1 0.01

U. S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

29-JAN-85

15:00:27

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 111
KEY No: 1 81 1291 1371
PROJECT Title: IAMRAAN TECH MOD
PROJECT No: 1
CLASSIFICATION: IUCI
TASK Title: IENABLING TECHNOLOGY
PERFORMING ORG: IAFSC
PO ADDRESS: IEGLIN AFB FL 32542

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	1300	0	0	0	0	0

MAN YEAR(s): 1 0.1 1 0.1 1 0.1 1 0.01 1 0.01 1 0.01
WORK UNIT SUM: [*****] [*****]
JOINT PROJECT: [+++]
DARPA Funding: 1 01 1100.01

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

29-JAN-85

15:00:55

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 121
KEY No: 1 61 1291 1 01
PROJECT Title: IMAGE PROCESSING LANGUAGE
PROJECT No: 120680644
CLASSIFICATION: IUC1
TASK Title: 1
PERFORMING ORG: IAFSC
PO ADDRESS: IEGLIN AFB FL 32542

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	48	144	200	86	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	48	144	200	86	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	0	0	0	0

MAN YEAR(s): 1 0.31 1 0.31 1 0.31 1 0.31 1 0.01 1 0.01
WORK UNIT SUM: |*****| |*****|
JOINT PROJECT: |+++|
DARPA Funding: 1 11 1 50.01

*****J*****

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

29-JAN-85

15:01:18

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 131
 KEY No: 1471 1291 1 01
 PROJECT Title: I
 PROJECT No: IF1962884C00
 CLASSIFICATION: IUCI
 TFSK Title: IGENERAL PURPOSE ROBOTIC SYSTEM
 PERFORMING ORG: IAFSC
 PO ADDRESS: IESD HANSCOM AFB MA 01731

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	0	0	0	0
6.2	0	0	0	0	0	0
6.3A	0	0	0	0	0	0
6.3B	0	0	0	0	0	0
6.4	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	145	62	0	0	0	0

MAN YEAR(s): 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01
 WORK UNIT SUM: |*****| |*****|
 JOINT PROJECT: IFA I
 DARPA Funding: 1 01 1 0.01

TAB B-1. Summary Printout: Army

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

20-MAR-85

12:20:37

MODULE: FND SUM

SERVICE: ARMY

KEYWORD(s):

1) MOBILITY/NAVIGATION

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	827	1331	893	710	550	518	4829
6.2	4703	11670	3076	775	600	700	21524
6.3A	205	125	200	425	1775	4725	7455
6.3B	3398	3682	2188	0	0	0	9268
6.4	0	0	0	0	0	0	0
TOTAL	9133	16808	5357	1910	2925	5943	43076

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	3043	4555	2312	867	1867	4807	17451
CONT	6090	12253	4045	1043	1058	1136	25625
TOTAL	9133	16808	6357	1910	2925	5943	43076

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	100	820	70	70	30	1090
CONT	0	1365	580	1530	1730	1070	6275
TOTAL	0	1465	1400	1600	1800	1100	7365

NUMBER OF PROJECT FOUND = 14

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:29:29

MODULE: FND SUM

SERVICE: ARMY

KEYWORD(s):

1) SENSOR

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	495	55	0	0	0	0	550
6.2	580	425	650	725	1310	2450	6140
6.3A	100	700	700	1500	3000	2500	8500
6.3B	0	0	0	0	0	825	825
6.4	0	0	0	0	0	0	0
TOTAL	1175	1180	1350	2225	4310	5775	16015

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	480	425	525	1600	3810	5275	12115
CONT	695	755	825	625	500	500	3900
TOTAL	1175	1180	1350	2225	4310	5775	16015

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	225	0	0	0	0	225
CONT	0	0	0	0	0	0	0
TOTAL	0	225	0	0	0	0	225

NUMBER OF PROJECT FOUND = 6

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:29:59

MODULE: FNDSUM

SERVICE: ARMY

KEYWORD(*):

1) MANIPULATOR

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	142	91	100	0	0	0	333
6.2	2688	6205	5549	6243	5825	6095	32605
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	2400	5557	7957
6.4	50	400	200	400	0	0	1050
TOTAL	2880	6696	5849	6643	8225	11652	41945

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	1563	2090	3004	3523	5810	9237	25227
CONT	1317	4606	2845	3120	2415	2415	16718
TOTAL	2880	6696	5849	6643	8225	11652	41945

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	500	1000	1200	200	400	3300
CONT	0	300	1000	1200	600	1100	4200
TOTAL	0	800	2000	2400	800	1500	7500

NUMBER OF PROJECT FOUND = 14

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:30:31

MODULE: FNDSUM

SERVICE: ARMY

KEYWORD(=):

1) ARTIFICIAL INTEL

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	468	735	600	400	0	0	2203
6.2	0	0	290	0	500	500	1290
6.3A	0	0	0	120	0	0	120
6.3B	110	111	275	350	160	0	1006
6.4	0	0	0	0	120	120	240
TOTAL	578	846	1165	870	780	620	4859

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	297	498	685	523	367	260	2630
CONT	281	348	480	347	413	360	2229
TOTAL	578	846	1165	870	780	620	4859

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	120	250	200	180	750
CONT	0	0	2300	1800	1800	2320	8220
TOTAL	0	0	2420	2050	2000	2500	8970

NUMBER OF PROJECT FOUND = 4

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:31:14

MODULE: FNDSUM

SERVICE: ARMY

KEYWORD(s):

1) MAN/MACH INTERFACE

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	75	100	100	0	0	275
6.2	150	300	500	600	650	700	2900
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	150	375	600	700	650	700	3175

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	75	225	310	360	300	300	1570
CONT	75	150	290	340	350	400	1605
TOTAL	150	375	600	700	650	700	3175

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 2

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:31:42

MODULE: FNDSUM

SERVICE: ARMY

KEYWORD(s):

1) CONTROL

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	293	270	300	240	300	1403
6.2	525	1601	1586	1776	395	400	6283
6.3A	124	0	0	0	612	2296	3032
6.3B	0	0	1600	3684	3000	1000	9284
6.4	0	0	0	0	0	0	0
TOTAL	649	1894	3456	5760	4247	3996	20002

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	325	1349	3035	5404	3625	1810	15548
CONT	324	545	421	356	622	2186	4454
TOTAL	649	1894	3456	5760	4247	3996	20002

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	50	50	60	50	210
CONT	0	0	100	150	200	150	600
TOTAL	0	0	150	200	260	200	810

NUMBER OF PROJECT FOUND = 9

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
15:32:15

MODULE: FNDSUM
SERVICE: ARMY

KEYWORD(s):

1) MATERIALS HANDLING 2) 3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	320	945	778	800	240	300	3383
6.2	3493	7306	7434	8243	7585	9045	43106
6.3A	224	200	200	120	0	0	744
6.3B	0	0	1600	3884	5560	7382	18426
6.4	0	0	0	0	120	120	240
TOTAL	4037	8451	10012	13047	13505	16847	65899

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	2270	3786	6414	9485	10227	13542	45724
CONT	1767	4665	3598	3562	3278	3305	20175
TOTAL	4037	8451	10012	13047	13505	16847	65899

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	725	1170	1500	460	630	4485
CONT	0	300	2500	3150	2600	3570	12120
TOTAL	0	1025	3670	4650	3060	4200	16605

NUMBER OF PROJECT FOUND = 23

**U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM**

22-JAN-85
15:32:49

MODULE: FND SUM
SERVICE: ARMY

KEYWORD(s):

1) INDUSTRIAL APPL

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	96	94	42	0	0	0	232
6.2	0	0	0	0	0	0	0
6.3A	0	0	0	0	0	0	0
6.3B	110	111	275	150	0	0	646
6.4	0	200	0	400	0	0	600
TOTAL	206	405	317	550	0	0	1478

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	40	61	75	50	0	0	226
CONT	166	344	242	500	0	0	1252
TOTAL	206	405	317	550	0	0	1478

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	900	0	0	0	900
TOTAL	0	0	900	0	0	0	900

NUMBER OF PROJECT FOUND = 5

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:33:18

MODULE: FNDSUM

SERVICE: ARMY

KEYWORD(s):

1) MEDICAL

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	495	0	0	0	0	0	495
6.2	0	0	0	0	0	0	0
6.3A	0	500	500	500	500	500	2500
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	495	500	500	500	500	500	2995

FY FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	495	500	500	500	500	500	2995
TOTAL	495	500	500	500	500	500	2995

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 1

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

20-MAR-85

12:33:52

MODULE: FND SUM

SERVICE: ARMY

KEYWORD(s):

1) AUTONOMOUS VEHICLE

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	827	1331	893	710	550	518	4829
6.2	5053	12230	3451	1155	995	1100	23984
6.3A	205	125	200	1425	4275	6725	12955
6.3B	3398	3682	2188	0	0	0	9268
6.4	0	0	0	0	0	0	0
TOTAL	9483	17368	6732	3290	5820	8343	51036

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	3343	4915	2632	2192	4702	7147	24531
CONT	6140	12453	4100	1098	1118	1196	26105
TOTAL	9483	17368	6732	3290	5820	8343	51036

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	100	820	70	70	30	1090
CONT	0	1365	580	1530	1730	1070	6275
TOTAL	0	1465	1400	1600	1800	1100	7365

NUMBER OF PROJECT FOUND = 17

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

20-MAR-85
12:33:07

MODULE: FND SUM
SERVICE: ARMY

KEYWORD(s):

1) BATTLEFIELD SYS

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	910	610	350	300	0	0	2170
6.2	4778	11850	2801	471	0	0	19900
6.3A	205	625	700	1725	3837	5021	12113
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	5893	13085	3851	2496	3837	5021	34183

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	447	1220	1185	1425	2650	2300	9227
CONT	5446	11865	2666	1071	1187	2721	24956
TOTAL	5893	13085	3851	2496	3837	5021	34183

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	20	70	70	30	190
CONT	0	0	490	1530	1730	1070	4820
TOTAL	0	0	510	1600	1800	1100	5010

NUMBER OF PROJECT FOUND = 11

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

16:32:59

MODULE: FNDSUM

SERVICE: ARMY

KEYWORD(s):

1) TELEOPERATED SYS

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	25	325	475	525	700	700	2750
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	50	200	200	0	0	0	450
TOTAL	75	525	675	525	700	700	3200

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	25	250	475	525	700	700	2675
CONT	50	275	200	0	0	0	525
TOTAL	75	525	675	525	700	700	3200

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 1

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
15:34:39

MODULE: FND SUM
SERVICE: ARMY

KEYWORD(s):
1) TARGET ID

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	194	210	250	0	0	0	654
6.2	0	0	0	0	0	0	0
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	194	210	250	0	0	0	654

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	80	80	250	0	0	0	410
CONT	114	130	0	0	0	0	244
TOTAL	194	210	250	0	0	0	654

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 1

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
15:35:13

MODULE: FNDSUM
SERVICE: ARMY

KEYWORD(s):

1) TECH MANAGEMENT

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	225	445	520	570	620	670	3050
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	225	445	520	570	620	670	3050

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	100	200	200	200	200	200	1100
CONT	125	245	320	370	420	470	1950
TOTAL	225	445	520	570	620	670	3050

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 1

ROBOTIC INFORMATION SYSTEM

22-JAN-85

MODULE: FNDSUM

KEYWORD (s) :

1)

21

31

PERFORMING ORGANIZATION: TROSCOM

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	412	721	543	410	550	518	3154
6.2	453	2136	2140	2143	1230	2580	10682
6.3A	0	0	0	200	1550	4500	6250
6.3B	0	0	1600	3684	5400	7382	18066
6.4	0	0	0	0	0	0	0
TOTAL	865	2857	4283	6437	8730	14980	38152

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	391	1573	3261	5719	7777	13889	32610
CONT	474	1284	1022	718	953	1091	5542
TOTAL	865	2857	4283	6437	8730	14980	38152

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	200	400	600
CONT	0	465	90	0	600	1100	2255
TOTAL	0	465	90	0	800	1500	2855

NUMBER OF PROJECT FOUND = 16

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:41:54

MODULE: FNDSUM

SERVICE: ARMY

KEYWORD(s):

1) 2) 3)

PERFORMING ORGANIZATION: AVSCOM

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	0	0	0	230	310	520	1060
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	0	0	0	230	310	520	1060

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	50	60	70	180
CONT	0	0	0	180	250	450	880
TOTAL	0	0	0	230	310	520	1060

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 1

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
15:42:25

MODULE: FNDSUM
SERVICE: ARMY

KEYWORD (S) :

1) 2) 3)

PERFORMING ORGANIZATION: TACOM

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	30	700	700	0	0	0	1430
6.3A	0	0	0	0	0	0	0
6.3B	3398	3682	2188	0	0	0	9268
6.4	0	0	0	0	0	0	0
TOTAL	3428	4382	2888	0	0	0	10698

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	2380	3398	1115	0	0	0	6893
CONT	1048	984	1773	0	0	0	3805
TOTAL	3428	4382	2889	0	0	0	10698

* UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	100	800	0	0	0	900
CONT	0	900	0	0	0	0	900
TOTAL	0	1000	800	0	0	0	1800

NUMBER OF PROJECT FOUND = 2

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:42:52

MODULE: FNDSUM

SERVICE: ARMY

KEYWORD(s):

1)

2)

3)

PERFORMING ORGANIZATION: AMMRC

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	55	0	0	0	0	55
6.2	0	0	0	0	0	0	0
6.3A	124	0	0	0	0	0	124
6.3B	110	111	275	150	0	0	646
6.4	0	0	0	0	0	0	0
TOTAL	234	166	275	150	0	0	825

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	40	61	75	50	0	0	226
CONT	194	105	200	100	0	0	599
TOTAL	234	166	275	150	0	0	825

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	900	0	0	0	900
TOTAL	0	0	900	0	0	0	900

NUMBER OF PROJECT FOUND = 3

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:43:48

MODULE: FND SUM

SERVICE: ARMY

KEYWORD(s):

1)

2)

3)

PERFORMING ORGANIZATION: ERADCOM

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	415	410	0	0	0	0	825
6.2	345	400	401	196	0	0	1342
6.3A	0	0	0	1000	3112	4296	8408
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	760	810	401	1196	3112	4296	10575

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	47	70	35	1025	2650	2300	6127
CONT	713	740	366	171	462	1996	4448
TOTAL	760	810	401	1196	3112	4296	10575

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	20	70	70	30	190
CONT	0	0	490	1530	1730	1070	4820
TOTAL	0	0	510	1600	1800	1100	5010

NUMBER OF PROJECT FOUND = 4

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:44:48

MODULE: FNDSUM

SERVICE: ARMY

KEYWORD(s):

1)

2)

3)

PERFORMING ORGANIZATION: MICOM

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	200	350	300	0	0	850
6.2	0	0	0	0	0	0	0
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	0	200	350	300	0	0	850

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	100	200	200	0	0	500
CONT	0	100	150	100	0	0	350
TOTAL	0	200	350	300	0	0	850

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 1

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:45:18

MODULE: FNDSUM

SERVICE: ARMY

KEYWORD(s):

1)

2)

3)

PERFORMING ORGANIZATION: ARO

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	142	91	100	0	0	0	333
6.2	0	0	0	0	0	0	0
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	142	91	100	0	0	0	333

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	142	91	100	0	0	0	333
TOTAL	142	91	100	0	0	0	333

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 3

U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

22-JAN-85

15:45:51

MODULE: FND SUM

SERVICE: ARMY

KEYWORD(s):

1)

2)

3)

PERFORMING ORGANIZATION: AMCCOM

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	468	943	970	800	240	300	3721
6.2	3013	3865	4295	4700	4940	4645	25458
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	3481	4808	5265	5500	5180	4945	29179

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	2095	2605	3355	3515	3155	3400	18125
CONT	1386	2203	1910	1985	2025	1545	11054
TOTAL	3481	4808	5265	5500	5180	4945	29179

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	500	1170	1500	260	230	3660
CONT	0	300	2500	3150	2000	2470	10420
TOTAL	0	800	3670	4650	2260	2700	14080

NUMBER OF PROJECT FOUND = 9

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
15:46:22

MODULE: FNDSUM
SERVICE: ARMY

KEYWORD(s):

1)

2)

3)

PERFORMING ORGANIZATION: HEL

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	160	0	0	0	0	160
6.2	1080	3595	3435	3420	3420	3770	18720
6.3A	100	200	200	120	0	0	620
6.3B	0	0	0	200	160	0	360
6.4	50	200	200	0	120	120	690
TOTAL	1230	4155	3835	3740	3700	3890	20550

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	680	1185	1630	1918	2337	2230	9980
CONT	550	2970	2205	1822	1363	1660	10570
TOTAL	1230	4155	3835	3740	3700	3890	20550

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	225	0	0	0	0	225
CONT	0	0	0	0	0	0	0
TOTAL	0	225	0	0	0	0	225

NUMBER OF PROJECT FOUND = 7

TAB B-2. Summary Printout: Navy

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:04:14

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):

1)

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	62	29539	0	0	0	29601
6.2	5380	5897	6760	1935	638	0	20610
6.3A	1355	350	0	0	0	0	1705
6.3B	921	2100	0	0	0	0	3021
6.4	0	0	1200	13000	1100	0	15300
TOTAL	7656	8409	37499	14935	1738	0	70237

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	2323	3369	3544	1835	1438	0	12509
CONT	5333	5040	33955	13100	300	0	57728
TOTAL	7656	8409	37499	14935	1738	0	70237

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	377	1200	0	0	0	1577
CONT	0	600	0	0	0	0	600
TOTAL	0	977	1200	0	0	0	2177

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	6400	0	0	0	6400

NUMBER OF PROJECT FOUND = 27

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:04:49

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):

1) SENSOR

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	2221	2850	5550	800	0	0	11421
6.3A	675	350	0	0	0	0	1025
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	2896	3200	5550	800	0	0	12446

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	526	750	900	0	0	0	2176
CONT	2370	2450	4650	800	0	0	10270
TOTAL	2896	3200	5550	800	0	0	12446

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	257	1200	0	0	0	1457
CONT	0	150	0	0	0	0	150
TOTAL	0	407	1200	0	0	0	1607

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 5

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:05:20

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):

1) MOBILITY/NAVIGATION 2) 3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	1340	1247	1210	1135	638	0	5570
6.3A	0	0	0	0	0	0	0
6.3B	921	2100	0	0	0	0	3021
6.4	0	0	1200	13000	1100	0	15300
TOTAL	2261	3347	2410	14135	1738	0	23891

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	1590	2557	2010	1835	1438	0	9430
CONT	671	790	400	12300	300	0	14461
TOTAL	2261	3347	2410	14135	1738	0	23891

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	15	0	0	0	0	15
CONT	0	150	0	0	0	0	150
TOTAL	0	165	0	0	0	0	165

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 6

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-83
17:07:57

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(=):

1) END EFFECTOR

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	1655	1800	0	0	0	0	0
6.3A	620	0	0	0	0	0	3455
6.3B	0	0	0	0	0	0	620
6.4	0	0	0	0	0	0	0
TOTAL	2275	1800	0	0	0	0	4075

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	125	0	0	0	0	0	125
CONT	2150	1800	0	0	0	0	3950
TOTAL	2275	1800	0	0	0	0	4075

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	15	0	0	0	0	15
CONT	0	150	0	0	0	0	150
TOTAL	0	165	0	0	0	0	165

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 3

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:08:30

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(*):

1) MANIPULATOR

2)

3)

FYDP FUNDING [RDT&E] (* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	62	5289	0	0	0	5351
6.2	0	0	0	0	0	0	0
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	0	62	5289	0	0	0	5351

FYDP FUNDING [6.1-6.4] (* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	62	139	0	0	0	201
CONT	0	0	5150	0	0	0	5150
TOTAL	0	62	5289	0	0	0	5351

UNFUNDED [6.1-6.4] (* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

OPN FUNDING (* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 3

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:09:00

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):

1) CONTROL

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	2050	0	0	0	2050
6.2	129	0	0	0	0	0	129
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	129	0	2050	0	0	0	2179

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	12	0	95	0	0	0	107
CONT	117	0	1955	0	0	0	2072
TOTAL	129	0	2050	0	0	0	2179

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	15	0	0	0	0	15
CONT	0	150	0	0	0	0	150
TOTAL	0	165	0	0	0	0	165

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	700	0	0	0	700

NUMBER OF PROJECT FOUND = 5

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:09:35

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):
1) STUDY/SURVEY

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	35	0	0	0	0	0	35
6.3A	35	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	70	0	0	0	0	0	70

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	70	0	0	0	0	0	70
CONT	0	0	0	0	0	0	0
TOTAL	70	0	0	0	0	0	70

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	75	0	0	0	0	75
CONT	0	0	0	0	0	0	0
TOTAL	0	75	0	0	0	0	75

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 2

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:23:23

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):

1) SYS INTEGRATION

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	22200	0	0	0	22200
6.2	0	0	0	0	0	0	0
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	0	0	22200	0	0	0	22200

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	400	0	0	0	400
CONT	0	0	21800	0	0	0	21800
TOTAL	0	0	22200	0	0	0	22200

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	5700	0	0	0	5700

NUMBER OF PROJECT FOUND = 2

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:10:08

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):

1) INDUSTRIAL APPL

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	29501	0	0	0	29501
6.2	4005	4150	4650	800	0	0	13605
6.3A	1320	350	0	0	0	0	1670
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	5325	4500	34151	800	0	0	44776

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	663	250	596	0	0	0	1509
CONT	4662	4250	33555	800	0	0	43267
TOTAL	5325	4500	34151	800	0	0	44776

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	287	1200	0	0	0	1487
CONT	0	450	0	0	0	0	450
TOTAL	0	737	1200	0	0	0	1937

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	6400	0	0	0	6400

NUMBER OF PROJECT FOUND = 17

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:10:44

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):

1) AUTONOMOUS VEHICLE 2) 3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	690	676	610	580	350	0	2906
6.3A	35	0	0	0	0	0	35
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	725	676	610	580	350	0	2941

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	615	526	510	480	350	0	2481
CONT	110	150	100	100	0	0	460
TOTAL	725	676	610	580	350	0	2941

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	25	0	0	0	0	25
CONT	0	0	0	0	0	0	0
TOTAL	0	25	0	0	0	0	25

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 3

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:11:20

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):

1) MATERIALS HANDLING 2) 3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	62	38	0	0	0	100
6.2	0	0	0	0	0	0	0
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	0	62	38	0	0	0	100

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	62	38	0	0	0	100
CONT	0	0	0	0	0	0	0
TOTAL	0	62	38	0	0	0	100

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 1

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:11:54

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):

1) TELEOPERATED SYS

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	650	571	600	555	288	0	2664
6.3A	25	0	0	0	0	0	25
6.3B	921	2100	0	0	0	0	3021
6.4	0	0	1200	13000	1100	0	15300
TOTAL	1596	2671	1800	13555	1388	0	21010

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	1010	2031	1500	1355	1088	0	6984
CONT	586	640	300	12200	300	0	14026
TOTAL	1596	2671	1800	13555	1388	0	21010

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	15	0	0	0	0	15
CONT	0	150	0	0	0	0	150
TOTAL	0	165	0	0	0	0	165

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 5

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

22-JAN-85
17:12:27

MODULE: FNDSUM
SERVICE: NAVY

KEYWORD(s):

1) AUTO SENSOR SYS

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	0	500	900	0	0	0	1400
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	0	500	900	0	0	0	1400

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	500	900	0	0	0	1400
CONT	0	0	0	0	0	0	0
TOTAL	0	500	900	0	0	0	1400

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 1

TAB B-3. Summary Printout: Air Force

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

21-JAN-85
16:08:29

MODULE: FNDSUM
SERVICE: AIR FORCE

KEYWORD(s):

1)

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	4485	4485	2030	2000	2000	2000	17000
6.2	3360	1865	2900	1749	0	0	9874
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	7845	6350	4930	3749	2000	2000	26874

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	357	500	750	1000	1000	3607
CONT	7845	5993	4430	2999	1000	1000	23267
TOTAL	7845	6350	4930	3749	2000	2000	26874

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	700	0	0	0	0	700
TOTAL	0	700	0	0	0	0	700

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	4896	3298	3846	319	0	0	12359

NUMBER OF PROJECT FOUND = 13

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

21-JAN-85
16:17:49

MODULE: FND SUM
SERVICE: AIR FORCE

KEYWORD(s):
1) ACTUATOR

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	0	269	300	0	0	0	569
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	0	269	300	0	0	0	569

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	269	300	0	0	0	569
TOTAL	0	269	300	0	0	0	569

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 1

1
U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

21-JAN-85
16:18:28

MODULE: FND SUM
SERVICE: AIR FORCE

KEYWORD(s):

1) ARTIFICIAL INTEL

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	1564	1272	1748	586	0	0	5170
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	1564	1272	1748	586	0	0	5170

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	1564	1272	1748	586	0	0	5170
TOTAL	1564	1272	1748	586	0	0	5170

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	1568	2000	900	0	0	0	4468

NUMBER OF PROJECT FOUND = 2

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

21-JAN-85
16:19:07

MODULE: FNDSUM
SERVICE: AIR FORCE

KEYWORD(s):
1) CONTROL

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	3300	3300	2000	2000	2000	2000	14600
6.2	0	0	0	0	0	0	0
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	3300	3300	2000	2000	2000	2000	14600

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	357	500	750	1000	1000	3607
CONT	3300	2943	1500	1250	1000	1000	10993
TOTAL	3300	3300	2000	2000	2000	2000	14600

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	1300	0	0	0	0	0	1300

NUMBER OF PROJECT FOUND = 3

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

21-JAN-85
16:19:42

MODULE: FNDSUM
SERVICE: AIR FORCE

KEYWORD(s):

1) MANIPULATOR

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	1185	1185	30	0	0	0	2400
6.2	370	63	0	0	0	0	433
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	1555	1248	30	0	0	0	2833

P FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	1555	1248	30	0	0	0	2833
TOTAL	1555	1248	30	0	0	0	2833

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	0	0	0	0

NUMBER OF PROJECT FOUND = 3

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

21-JAN-85
16:20:26

MODULE: FNDSUM
SERVICE: AIR FORCE

KEYWORD(s):

1) SENSOR

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	1426	261	852	1163	0	0	3702
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	1426	261	852	1163	0	0	3702

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	1426	261	852	1163	0	0	3702
TOTAL	1426	261	852	1163	0	0	3702

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	700	0	0	0	0	700
TOTAL	0	700	0	0	0	0	700

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	1883	1236	2948	319	0	0	6384

NUMBER OF PROJECT FOUND = 3

U. S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

21-JAN-85
16:21:06

MODULE: FNDSUM
SERVICE: AIR FORCE

KEYWORD (*):

1) SYS INTEGRATION

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	0	0	0	0	0
6.2	0	0	0	0	0	0	0
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	145	62	0	0	0	0	207

NUMBER OF PROJECT FOUND = 1

U.S. ARMY HUMAN ENGINEERING LABORATORY
ROBOTIC INFORMATION SYSTEM

21-JAN-85
16:21:45

MODULE: FNDSUM
SERVICE: AIR FORCE

KEYWORD(s):

1) INDUSTRIAL APPL

2)

3)

FYDP FUNDING [RDT&E] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	4485	4485	2030	2000	2000	2000	17000
6.2	3360	1865	2900	1749	0	0	9874
6.3A	0	0	0	0	0	0	0
6.3B	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0
TOTAL	7845	6350	4930	3749	2000	2000	26874

FYDP FUNDING [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	357	500	750	1000	1000	3607
CONT	7845	5993	4430	2999	1000	1000	23267
TOTAL	7845	6350	4930	3749	2000	2000	26874

UNFUNDED [6.1-6.4] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	0
CONT	0	700	0	0	0	0	700
TOTAL	0	700	0	0	0	0	700

7.8 FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	4896	3298	3846	319	0	0	12359

NUMBER OF PROJECT FOUND = 13